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ORIGINAL DEPARTMENT.

COMMUNICATIONS.

TUBERCULAR MENINGITIS.

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October 16, 1884, I was sent for in haste to attend the six year-old Mary K., daughter of a widow, whose husband had died two years before of pulmonary phthisis. On my arrival, the mother gave me the following description of her daughter's illness:

Mary had been a healthy girl and never suffered from any of the usual diseases incidental to childhood, until about a week previous to my seeing her. Then one morning she awoke earlier than was her habit, being seized with diarrhœa, which had since alternated with constipation. Her mother, however, had become alarmed mainly at the great change which she observed in her daughter's spirits. Mary used to be a very bright and somewhat wild girl; she never cared to sit still indoors, but always desired to play out in the air with other children. It was the most difficult work to induce her at nights to retire. Since her illness she often sat for hours quietly in her little arm-chair, appeared tired, and found no pleasure in joining the company of her playmates. And aside from all this, a peculiar listlessness had had come over her, so utterly at variance from her former vivacity, that her mother conceived the idea that some serious illness was beginning to operate within the child. How correct this opinion was the following will show.

The morning of the day when I was called, Mary had been particularly sleepy on awakening, and besides suffering from the diarrhœa, had greatly complained of headache. The least pressure seemed to augment the pain. When, after leaving her bed, she stepped across the room, her gait was unsteady; once or twice she appeared to reel, and cried out, "Oh, mamma, I am falling!" Her mother assisted her to a chair, and after dressing her persuaded her to partake of some food. Scarcely had Mary swallowed a mouthful of milk and a piece of bread and butter, when she was seized with vomiting, and immediately after she became unconscious and her whole body convulsed. But she soon recovered consciousness and was carried back to her bed, where I found her.

She lay there perfectly apathetic, the glare of the daylight seemed to hurt her, and the least noise to be painful to her acute sense of hearing. The room had to be darkened, and the attendants had to walk on tip-toe, to ease the little girl's suffering. At the same time she complained of pain in her head, and often held her little hands against it, though not permitting anybody else to touch her, the pain being evidently increased on pressure.

During the following week she remained much in the same condition. In daytime she often lay still for hours together, but was easily startled, especially by any sudden though ever so moderate noise, and could not bear the glare of the sun or gaslight. Whenever she was lifted, she had the sensation as of falling; the few times that she tried to walk a few steps, she reeled like a drunken person. Occasionally her physiognomy was peculiarly altered; her face appeared full of

grimaces, her facial muscles being evidently seized by a spasm. But her mother experienced the greatest anxiety at night, for Mary then, all at once, uttered a piercing scream, the so-called encephalic cry, and started up, as if she had been frightened by an ugly apparition. The vomiting persevered during the whole of this week; with rare exceptions, everything taken into the stomach was at once thrown up. There was no appetite; the tongue, though moist, was covered, contrary to most teachings, by a whitish fur; all diarrhœa had ceased, and constipation difficult to surmount, reigned instead.

The poor girl rarely passed a day during this period without her having one or two convulsions. They were always accompanied by chilly sensations, and often she seemed to suffer besides from internal spasms, which were indicated by her distorted features and by the same chills as those observed with the general convulsions. The spastic element occasionally showed itself only by the grinding of her teeth.

Towards the end of this week the picture somewhat changed, and assumed a still graver aspect. At times a slight increase of temperature had been noted before this, but the thermometer now recorded 101° F. every afternoon and about 101.2° every night. The pulse, somewhat increased in number of beats from the start, now began to be irregular. To the spasms, rigidity became added. The muscles of the nape of the neck and of the back at times contracted, and often remained stiff for several hours at a time; then relaxation set in, only to be again followed by the former rigidity. The abdominal muscles shared the same fate, but they permanently retracted and presented the well-known hollow appearance. Squinting also occurred; the eye-balls were occasionally turned upwards and the left pupil became decidedly dilated. I tried to make an ophthalmoscopic examination, but her sensitiveness to light was so great that I did not succeed, though I made repeated trials. I have never seen Trousseau's sign better expressed than was here the case. That the little girl became greatly emaciated will not surprise us, for she made but rarely an attempt at eating, and all the food that she did swallow was vomited again. Her skin assumed a sallow hue and was very dry.

In the afternoon of the tenth day—counting from the time when she came under my charge—the next stage of the disease was ushered in by a general convulsion, more violent than any she had yet suffered from. When the convulsion ceased, Mary did not at once regain consciousness, but fell into a comatose state, lasting for nearly twelve hours. When she came to she appeared very apathetic, and all former symptoms of irritation seemed to have vanished. She was no longer fretful, the eyes had lost their sensitiveness to light, noises no longer startled her, but her cries by night became still more frequent. The spastic and permanent contractures, however, not only remained, but were more expressed than had previously been the case. Her pupils henceforth remained decidedly uneven and the eyeballs diverged, while her face appeared greatly contorted, utterly changing the aspect of her once so lively features. Her head was buried deeply into the pillow, being thrust far back by the contraction of the muscles of the nape of the neck. The least attempt at bringing her head into a different position at once elicited a cry. Her left pupil was fixed, and did not at all react to light.

The twentieth day I noticed that her left arm was paralyzed. The pulse had become more rapid, but also more irregular, while her temperature no longer exceeded 99.3° F. The evening of the following day she was troubled with cough, for the first time since her illness. On examination, I found as the only morbid condition likely to explain this cough, hypostatic pulmonary congestion. Since her first attack of coma she had had one like it daily, her condition really being one alternating of coma and apathy. This state still continued, but the coma lasted by far the greater part of the day. There was no vomiting; the small amounts of milk, beef juice, and stimulants which she swallowed were retained. She seemed only to vegetate, the functions of circulation and of respiration almost being the only ones still carried on. Reflex irritations no longer elicited any response; but the convulsions, instead of ceasing, increased in frequency and degree.

The thirty-third day her pulse was 146; that day her respiration for the first time became noisy and irregular. There was nothing left of her by this time but the skeleton covered with a dried-up skin. Toward evening the next day her temperature suddenly commenced to fall; the thermometer, once applied in the mouth and once in the axilla, each time recorded 96.1° About five minutes later—the clock in the room had just struck six—the noisy respiration suddenly ceased; for the first time in several days Mary widely opened her eyes; her features appeared peaceful, and something of the light of the immortal spirit once more flickered across her emaciated countenance; with an intelligent look she turned toward her mother, who had so faithfully nursed her, and

parting her lips, she whispered, scarcely to be heard, "Water." When almost the next instant her mother held the glass to Mary's lips, first raising the patient's head, she discovered that the spirit had flown. I had closely watched the impressive scene; while applying the thermometer the last time the noisy respiration and the coma were continuing; a few minutes later, the clock struck the hour, and I at once noticed the ominous silence in the room, a silence which I can compare only to the passage of the death-angel, so beautifully described by the great German poet. Turning round to discover the cause of this sudden quietude, I observed the alteration mentioned in the patient's face, and found that the respiration was no longer noisy. Scarcely had the whispered word passed her lips, when her features relaxed, and the inexorable destroyer of all living beings ended the sufferings and the earthly existence of the child forever.

February 3, 1885, I was sent for by the wife of a patient of mine, R. F., whom I had attended for over a year for a left-sided empyema. This had apparently been cured; contraction of that side of the chest had ensued, but the patient still continued to cough, and did not gain in weight. Several months ago I had discovered dullness over the left and the right apex, and the temperature of the patient had since been 99.4° F. every night. When I was sent for the patient had been suffering for three or four days from constipation; an hour before I arrived he had taken his third dose of castor oil and immediately after been seized with vomiting and intense headache. The pain extended all over the head, but was not increased on pressure. I found the room dark, the patient explaining that the light hurt his eyes; at the same time he requested me to speak less loudly, as the noise "jarred his nerves." He was then sitting on a chair, and when I asked him to rise that I might examine him better, I noticed that his gait was unsteady, and he admitted feeling giddy when walking.

It was but with difficulty that I received these replies from him; he answered, but slowly, and most of the time I had to wake him out of his dreamy condition. This surprised me the more, as he had always been a great talker, and, in general, a very restless person. His wife said that he had been in his usual health up to within a few minutes after he had taken the last dose of castor oil, though she admitted his having been exceptionally irritable for the three days preceding, during which he had been constipated.

The disease in F. made rapid progress. The very next day he had to seek his bed, which he never left again. The symptoms, as they rapidly developed during the first week, were as follows: For hours he lay in a dreamy, half-sleepy state; then he was suddenly seized with delirium, during which he either sang all the while or talked all kinds of nonsense. He accompanied the singing by a continuous motion very similar to the one practiced by the leader of an orchestra, only more exaggerated. Then, again, he stared for half a day into vacant space, while picking in an absent-minded manner at the bed-clothing, or he remained for hours seemingly unconscious of himself and his surroundings. Several times at night he suddenly jumped out of bed, apparently frightened by some hallucination. He generally eat very little, though occasionally evincing a most voracious appetite, but whatever he swallowed was immediately vomited. The constipation persevered and yielded only every third day to drastic injections.

The ninth day he was suddenly seized with alternate divergence and convergence of his eyeballs, and the nape of his neck became stiff and remained permanently in that state. When I observed this rigidity, I examined his abdomen and found it flat and also somewhat retracted. His features at times were distorted, and the twelfth day this spastic condition attacked only the left side of his face, and ptosis of the left eyelid set in. That day I made an ophthalmoscopic examination. I discovered tubercles on the choroid and venous stasis of the papilla. His pulse about this time became very slow—between 56 and 60 per minute—and slightly irregular; the temperature every evening ascended to 100° F., being normal the rest of the day. His skin assumed a yellowish hue.

The thirteenth day F. appeared brooding. Towards noon he fell into a heavy sleep, lasting ten or more hours. The same occurred during the next two days. While thus asleep, he frequently moaned and touched his head. Then, again, he performed with his jaws a continuous chewing-like motion. The fifteenth day left facial palsy developed itself, and F. appeared to move his right arm and leg less than the extremities on the opposite side. The right side of his forehead and of the right temple were anæsthetic. Towards night his pulse became somewhat more rapid and more irregular. His spleen, which thus far had not seemed to be enlarged, decidedly augmented in size. During the night from the fifteenth to the sixteenth days F. fell into a deep

coma, and his respiration assumed the typical character of Cheyne-Stokes's. The sixteenth day at 11 a. m. he appeared to have a rigor; when I saw him at 11:30 a. m. his temperature was 109°, the pulse full and rapid—about 138—but very irregular, and at 1 p. m. death suddenly occurred, without his having recovered consciousness.

In both cases I made a post-mortem examination, but found nothing of special interest. In both instances the brain presented the usual and well-known picture of tubercular meningitis, and I refer, therefore, the reader to any work on pathology. I will mention only the facts, that on the surface of the convexity of the left anterior lobe at the seat of the first convolution, there was discovered in F.'s case some purulent matter, while in both cases intraventricular exudation was met with to a high degree. Whether this last fact explains the comatose condition, is difficult to say, cases having been published where coma occurred without increase of serum in the lateral ventricles. Whether there ever was a case in which a comatose state frequently occurred without well-developed extravasation in the ventricles, I cannot say. To my knowledge, whenever, in tubercular meningitis, coma seems to alternate with some other more or less apathetic condition, there is found after death an increase of serum in the ventricles.

As a rule, we may say that tubercular meningitis happens in individuals—children or adults—in whom (or in whose family) the tubercular taint exists. We often discover on inquiry, that some member of the patient's family has died of consumption, and in such a case the patient himself need not show any sign of tubercles previous to the meningeal disease. Or the patient gives evidence of scrofula, and here chronic enlarged glands, especially, are of diagnostic importance. Again, miliary tuberculosis, chronic pneumonia, pleurisy, etc., form the underlying malady, in the course of which the meningeal complication suddenly springs up.

While the usual course of the disease is well represented in the two cases above reported there are others where the picture of the malady is very different. Thus sudden paralysis occasionally begins the case, the palsy attacking either the vertical centre of speech, or one motor oculi, or one arm, or one side of the face, a. s. f. At times the complaint sets in with unconsciousness, or psychical symptoms appear in the foreground; in one case reported by Huguenin, the patient was seized with maniacal delirium. While some cases run a very rapid course, death occurring within the first week, others greatly resemble typhoid fever and may have a very protracted course. Though the pia mater is the original and main seat of the lesion, and though tubercular foci are never wanting at the base of the brain, there are cases where the fissure of Sylvius (its artery), the isle of Reil, or other parts, especially suffer. According to special localities, we may have peculiar phenomena. Still more difficult becomes the diagnosis if tubercular meningitis supervenes upon some chronic cerebral disease.

My experience, though not very considerable, has taught me to consider in the case of children the following points, when present, as sure indications of the existence of tubercular meningitis: When a child, in whose family there exists the tubercular taint, or which suffers from scrofulous swelling, suddenly, and without any apparent reason, becomes permanently changed in its temper, when, then, vomiting, constipation, and headache set in, to which are soon added irregular fever and an irregular pulse—provided all other diseased can be excluded—there is suspicion of the child being attacked by tubercular meningitis; a suspicion which becomes a certainty, if retraction of the abdomen, convulsions, and local spasms or local palsies—especially such of the third nerve—also occur.

In adults, if we cannot prove the existence of tubercles in the choroid, and thus at once recognize the disease, the diagnosis of tubercular meningitis becomes plausible, if intense headache and great apathy, or delirium, or coma, or all three, accompanied by ptosis or other local palsies of the eye or of one side of the face, and if one or more convulsions and rigidity of the muscles of the nape of the neck occur simultaneously or in rapid succession, and if while other diseases can be excluded, there is reason to assume the presence of a tubercular taint in the system. Neither Trousseau's well-known sign nor the encephalic cry is pathognomonic of acute hydrocephalus, and the irregular pulse, the palsy of the motor oculi or that of the face, and the convulsions are also met with in simple basilar meningitis, while the most violent delirium may be present in tubercular meningitis, though the convexity of the brain will then be found after death also to have been the seat of a purulent inflammation.

From these remarks, as well as, indeed, from the reports of the most experienced writers on this disease, the conclusion may, therefore, be drawn that there is not a single pathognomonic symptom characteristic of tubercular meningitis, but that it is the peculiar grouping together of a

series of symptoms happening under certain circumstances and in individuals either with a hidden tubercular taint, or with tuberculous lungs or glands, or suffering from miliary tuberculosis, or from scrofula, which authorizes us to diagnosticate hydrocephalus acutus.

A correct diagnosis, especially in children, is of vital importance, for lepto-meningitis infantum, whose symptoms greatly resemble the tubercular disease, is not necessarily a fatal malady, and other forms of meningitis also lead at times, at least, to a partial recovery. But tubercular meningitis, in my opinion, is invariably fatal. Though cases of apparent cure have been reported by trustworthy authors, a possibility of a mistake in diagnosis may so easily happen, that we cannot rely upon a few isolated cases as proofs. No post-mortem examination has yet been recorded, where the pia mater had given evidence of absorption of miliary tubercles, or of anything demonstrating the established cure of tubercular meningitis. If the cases of reported cure had ended as Huguenin's accidentally did,* the same result would probably have been always obtained.

Regarding treatment, we can speak only of palliative measures. The latest remedy in vogue —inunction of the head with a strong iodoform ointment—has not prevented the fatal end in the only case in which I tried it, nor influenced in the least the course of the disease. A blister to the epigastric region will often relieve the vomiting, and decided doses of the bromides lessen the frequency and the degree of the convulsions.

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VOICE IN SINGERS.

ABSTRACT OF A PAPER READ BEFORE THE 39TH ANNUAL SESSION OF THE OHIO STATE MEDICAL SOCIETY, AT DAYTON, JUNE 5, 1885,

BY C. H. VON KLEIN, A. M., M. D.

The paper began with the exclamation, "Voice, beautiful voice, what is more precious than a delightful voice?" It has charmed kings and queens, princes and princesses, poets and peasants; it has been cultivated by thousands in every country and in every century. Vocal music has its origin with the beginning of mankind. But why does Italy produce such grand voices, not only among her own people, but even among those from other countries who go there to cultivate their voices? This success has been a mystery for ages. In the language of Gambetta, "Italy, beautiful Italy, where every man's voice is the voice of a mocking-bird." Two-thirds of her people can neither read nor write, yet her success becomes greater every year. The art of combining sounds agreeable to the ear has become a profound science.

Here followed a lengthy consideration of the anatomy and physiology of the vocal organs, closing with the assertion, "If all men were perfect all men would be singers."

Through the kindness and under the auspices of the late Dr. Bordini, of Rome, the author had made the examination of the throats of thirty-two Italians, thirteen of whom were professional singers. The Italians appear to have natural organs of voice for music. He found the throat very roomy, the tonsils almost level with the fauces, the uvula extending only $\frac{1}{8}$ of an inch from the soft palate, the posterior nares very large, the larynx thickly lined with a smooth mucous membrane, the trachea enormous. Another peculiarity was, the author found it very seldom necessary to use a tongue depressor. They seem to place their tongue down to the mylohyoid muscles, forming it into a concave shape. This accomplishment is necessary for a singer, and can be effected only by long and tedious training. Almost all nations appear to have cultivated their voices without regard to their timbre.

The Jewish people in very early times used vocal music in their religious ceremonies. The psalms of David and the songs of Solomon were executed with vocal music. The Egyptians, says Strapo, taught their youth vocal music by physicians. The mythology of Greece shows the ancient history of vocal music. The term music comes from Muses. There was a band of singers in the service of Osirisis. Roman music was cultivated by Servius Tullius 600 years before Christ. The Romans were accustomed to the best singing that the age afforded. Augustus, who did not at first esteem singing, late in life engaged a physician to regulate his voice. The Chinese, whose voices resemble that of a crow, cultivated vocal music from the time of Yaa and Chun, twenty-three centuries before Christ. Among modern nations, the cultivation of the voice has become one of the greatest arts. France established schools

*Huguenin reported a case of tubercular meningitis as cured. The symptoms really seemed to indicate beyond the shadow of a doubt the ailment as hydrocephalus acutus. Later the child died of pneumonia, with cheesy degeneration, and the post-mortem examination proved the apparent meningeal disease to have been simple serous effusion, "neither fresh miliary tubercles nor traces of absorbed tubercles were to be found either in the pia mater or elsewhere."—Huguenin's admirable article on "Affections of the Pia Mater," in Ziemssen's Cyclopædia, vol. xii.

of music in the 10th century. Germany has produced masters in vocal melody. Hungarians who came from Asiatic Europe in the 9th century, brought with them their vocal music. They were so fond of it that Bella III. sent an envoy to Paris in 1192 to be instructed in melody. In England, during the reign of Elizabeth, the talent of voice had been so cultivated that it has been surpassed in no country. The Swedes, Norwegians, Danes, Russians, Poles, Bohemians, Spaniards, and Potuguese are all music-loving people.

We now come to Italy, the nation of natural singers. Many theories as to the cause of Italy's numerous singers have been advanced, but few of them are tenable. The climate gets the credit of most of it. Let us then review and examine the climatic influence on voice. Mere latitude cannot determine climate. Paris lies north of Quebec, yet has a milder climate. The lowest temperature ever known in Italy was 2° below zero. In Ohio it reaches 20° below. It is true that the hygienic preservation of the voice depends on climate, but its development does not. Meliot states that in hot countries there are firmer voices than in cold ones. If a warm climate aids the development of the voice, why is it that the birds which possess the most diversified and complicated organs of voice, such as the nightingale, mocking-bird, lark, etc., are generally found in the cold climates, while on the contrary, the crow and parrot, coarse, noisy birds, inhabit hot or mild climates? It is claimed that the air of elevated plateaus has great influence on vocal organs, yet the Swiss and the inhabitants of the Alleghany and Rocky Mountains do not excel in song. Italy's superiority has been attributed to her sea breezes. The inhabitants of our Atlantic, Pacific, and Gulf States do not excel in song. One of the greatest follies is the theory advanced that the air of Italy is impregnated with iodine, bromine, and various saline principles, which is the cause of vocal improvement. Dr. Moffat, of Glasgow, claimed lately to have found the voice-making of Italy. He says on analysis it contains peroxide of hydrogen and free ammonia. He has an invention, the "ammoniaphone," which will destroy all deficiencies in voice culture Any one who will use one of these instruments will not be obliged to pursue a long course of study if he will daily take a few inhalations. This will entirely metamorphose the anatomy of the respiratory organs, changing the most uncultured and unmusical voice to one of surprising sweetness and melody. This is simply absurd delusion and deceit, ridiculous, mysterious, and false. The greatest singers of the world are not Italians, nor do they come from northern Europe. Parepa-Rosa came from old Scotland; Jenny Lind, Mad. Tarinia, Ostora, and Christine Nillson, from cold Sweden; Adelaide Phillipps and Elizabeth Billington, from England; Mad. Rudersdorf, from Russia; Mad. Theresa, from Hungaria; Henrietta Sontag and Paulina Lucca from Germany; La Blanche and Sophia Arnold, from France; Mad. Persiani, Louisa Kellogg, Emma Albani, and Miss Carey, from America; Adelaide Patti and her sister Caroline, though born in Spain, came to America when babes, and made their first appearance on the American stage at the age of nine years.

It is true that almost all those mentioned cultivated their voices in Italy, but their success cannot be due to Italian air. If inhalation of ammonia would have a tendency to improve the voice, all camel drivers, cow boys, and hostlers would be great singers. Some, as already remarked, have attributed the voice-making of Italy to iodine in the air. If true, why are not the sailor and fisherman, who constantly inhale marine vapors, great singers? One has said to me he attributed the success in music to the Italian language. Why, then, are not Gypsies great singers, who have the sweetest tone in their dialect? Another accredits the cause of excellence to the tyrannical discipline of the Italian schools and their peculiar mode of training and teaching. Those who go to Italy have made considerable progress in voice culture. They simply go there to refine it. The natives of that country, as a rule, confine themselves to music. Almost two-thirds of its inhabitants make a livelihood in this way. We must also consider the modification of the natural anatomical development of the lungs, trachea, and larynx, the scope of the throat, tongue, etc., which is peculiar to their race.

We have now considered the voice of Italy anatomically, physiologically, climatically, and gymnastically. If, however, we would consider the voice of nations, we would find that America has produced the greatest voices upon the face of the earth. The natural melody and sweetness of tone in American women has charmed the world, which adds to the enjoyment and fame of the American people.

—When Archbishop Whately was pestered by an aid-de-camp's conundrums, he thus disposed of him: "Do you know the difference between an aid-de-camp and a donkey?" "No," replied the aid-de-camp. "Neither do I," rejoined the archbishop.

Hospital Reports.

A CLINICAL LECTURE DELIVERED AT THE PHILADELPHIA HOSPITAL.

BY EDWARD T. BRUEN, M. D.,

Physician to the Hospital and Assistant Professor of Physical Diagnosis in the University of Pennsylvania.

Reported by WILLIAM H. MORRISON, M. D.

Hepatic Abscess, Phlebitis.

GENTLEMEN: The case which I present to you this morning is presumably one of hepatic abscess. Although the diagnosis is a little obscure, yet a study of the case itself will give us many interesting lessons respecting the symptomatology and etiology of abscess in this important viscus.

This old lady presented herself at the hospital some two weeks ago, with a lump under the margin of the ribs on the right side. It was about the size of a lemon, extended around the margin of the ribs to the right flank, and presented fluctuation. The introduction of the needle of a hypodermic syringe revealed the presence of pus.

The next step in the analysis of the case, was of course to review the possible causes of abscess in this region. In the first place the possibility of an abscess in the connective tissue of the back, an ordinary lumbar abscess, came up for consideration. This was speedily dismissed, because as the old woman is quite thin, it was readily determined that the external tissues were not affected, and that the abscess was a deep one.

We next studied the condition of the kidney by examining the urine. This was found to be nearly normal, so far, at least, as the secretion from the kidney was concerned. I shall, however, give you some reasons for believing that the bladder was not quite normal.

Examination of the lungs showed pulmonary resonance down to the tenth rib, posteriorly, the eighth rib in the axilliary region, and to the fifth rib anteriorly. The respiratory murmur was normal over the right lung, and there was no evidence of any pleuritic trouble. I refer to this because in the consideration of hepatic abscess, it is important to eliminate the possibility of empyema, since this is the most frequent cause of error in diagnosis. In addition to the points already referred to, I would call attention to the fact that in empyema of the right side, the liver itself is immovable, whereas if the abscess is in the liver, the organ will move to a certain extent during respiration, which movement will be revealed by careful percussion. This point is regarded by Frerichs as one of the most important next to the physical examination of the thorax.

Having excluded the possibility of empyema, having decided that the kidneys are normal, and having excluded the possibility of simple abscess in the connective tissue, we concluded that in all probability the abscess was in the liver. An incision was therefore made into the abscess, and about twelve ounces of pus was evacuated. The pus which escaped was tinged with green, evidently from the bile.

Having secured this evidence of deep-seated abscess, a probe was introduced, which passed upwards and buried itself for a distance of three inches in the hepatic substance.

With these facts in our mind, let us consider what further study of the case we can make with advantage. One of the most important conditions leading to a correct diagnosis is the existence of some cause for the abscess. Abscess of the liver is not infrequent in hot countries, but it is uncommon in this latitude. It is found that in hot countries it is nearly always connected with some form of disease of the intestinal canal, such as dysentery, or intestinal ulceration. The next most common condition is inflammation of the portal vein itself. As a result of inflammation, thrombus of the portal vein occurs, and from the area of thrombus, emboli are carried into the substance of the liver leading to the formation of abscess. It is, however, important to note that in this latitude abscess of the liver frequently occurs without this etiological relation. In six cases of hepatic abscess occurring in this hospital, in none of them was a lesion of the intestine found. It is therefore evident from these cases, as well as from the study of the literature of the subject, that in temperate climates hepatic abscess is not so frequently associated with intestinal affections as in the tropical zones. In the present instance, there is no symptom to lead us to suspect intestinal disease of any kind.

It has been assumed that a local injury may lead to hepatic abscess, and it is therefore important to carefully look for any evidence of a local origin of the inflammation. We can not attribute this abscess to such a cause.

Having excluded these causes of hepatic abscess, I have carefully considered the history of the patient to try and determine what condition of the system would predispose to the abscess. The patient's age (fifty years), would seem to place her beyond the period where abscess might develop from congestion of the liver. We find, on a close study of the case, a history of cystitis and uterine congestion. Six months ago, she was under treatment in the gynecological wards for some form of uterine disease which was associated with cystitis. There were no indications of pyelitis, for the urine was mixed with mucus. If there had been pyelitis, there would have probably been a large amount of pus, associated with a certain amount of pain in the back. It is, however, difficult to establish exactly the differential diagnosis between pyelitis and cystitis.

I would associate this condition of hepatic abscess with the cystitis and uterine disease. There has probably been inflammation of some of the veins around the uterus and the bladder, and the formation of thrombi in these veins, with the transference of emboli or irritating material to the liver and the development of secondary abscess. In support of this view we have the well-known pathological fact that next the disease of the intestinal canal, abscess of the liver is most frequently connected with some form of inflammation of the veins of the lower extremities, or of the pelvis. Bearing in mind this point in reference to the etiology, let me call attention to the symptoms. One of the important features of this case has been the absence of any symptoms indicating an internal collection of pus. Under these circumstances, you are supposed to have hectic

fever and sweats, the peculiarity of this sweating being that it is intermittent. Sweating sometimes occurs from prostration of the system from exhausting diseases, such as typhoid fever; this sweating is apt to be constant. I have recently had this fact forcibly brought before me by a case in which the differential diagnosis as to the presence or absence of pus hung largely upon this symptom.

As regards the temperature, in some cases of hepatic abscess the temperature fluctuates in the way usual in hectic fever, but not to the same extent. There seems to be a rule about the variation of the temperature, and this is that it changes with the functional activity of the organ, that is to say, during the periods while the patient is taking food. Simple as that observation may seem to be, it has an important bearing upon some cases of abscess which are apyretic. Abscess of the liver occurs quite frequently without there being a single symptom of elevation of temperature. I recall one case occurring in this hospital. The patient was supposed to have some form of jaundice. He walked down stairs, smoked his pipe, and suddenly dropped dead from rupture of an abscess into the peritoneal cavity. Cases are frequently reported in which the temperature does not go above one hundred, or even above ninety-nine. How do we explain this? You will recall that the physiological temperature of the liver is about 106°, and that the temperature of the liver is elevated during the process of digestion perhaps to 107°, 108°, or 109°. On the other hand, if the liver is inactive, the temperature of the organ will decrease. It has been experimentally demonstrated that if the products of liver digestion are rapidly absorbed into the system, the general temperature will rise, while on the other hand, it has been demonstrated that if an animal is starved, the general temperature will fall, as will also the hepatic temperature. Applying these facts to the condition before us, we can understand that although there has been the formation of an abscess in the liver, which would naturally tend to increase the temperature of the whole body, yet the patient being feeble and anæmic, with poor digestion and diminished functional activity of the liver, the temperature has not been markedly increased.

Let me now refer to the character of the pus. It was formerly stated by many authorities, that pus drawn from the liver was chocolate color. This is due to admixture of blood with the pus, and is dependent upon some alteration of the blood vessel structure of the gland. In this case, as in the majority, the pus presented the ordinary characteristics. It was streaked with bile, which was due to the opening of some of the biliary channels.

Abscess of the liver is far more common in the right lobe than in the left, and the anterior portion of the right lobe is the most common situation. Although hepatic abscess may open anywhere, it usually opens below the ribs. The next most frequent mode of opening is through the diaphragm into the pleural cavity, and thence through the lung and the bronchial tubes. Next to these the opening may occur into the colon or directly into the peritoneum. These facts show the importance of tapping abscess of the liver early. I was surprised, I may say horrified, on reading the statement in Quain's Encyclopœdia of Medicine, that abscess of the liver should not be tapped, because it will finally work to the surface and adhesions will form between the abdominal wall and the liver, and the abscess will open spontaneously, or may be opened more readily than if exploratory tapping is attempted. I am quite sure that the general experience in connection with abscess of the liver is that it should be tapped as soon as there is reason to expect the existence of pus, since perforation into the peritoneum is not unlikely. An exploratory needle may be introduced into the tissue of the liver, and the organ explored in various directions without injury. Too much stress I think has been laid on the necessity of having adhesions between the liver and the adjacent tissues before the opening is made. The aspirating needle can be introduced and the pus withdrawn without wounding the peritoneum. I can hardly think of an abscess of the liver so situated that it could not be opened in some of the positions in which the liver is superficial.

After the abscess has been opened and drained, what is the outlook for the patient? It is reasonably favorable in an individual whose nutrition is good. Abscess of the liver often has no capsule, its walls consisting of hepatic substance. Cicatrization of a very large abscess of the liver is unusual on this account, but in an individual whose general nutrition is good it is reasonable to hope for cicatrization of hepatic abscess after drainage, in the same way that we have healing of any other abscess. Still, the course of the majority of cases is towards a gradual exhaustion of the patient from suppuration. I fear that this case is one in which an extremely favorable prognosis can not be entertained; at the same time she has been doing well since the abscess was opened, and her temperature has not been above 100°.

Before dismissing this case, let me refer to one other matter. Should we inject this abscess? I think there is no reason why an abscess of this kind should not be treated on general principles, but I think that the solution should be weaker than those used in the pleural cavity. Disinfectant solutions are only to be used when the pus has an unhealthy odor. Injections for the cure of abscess are used for two purposes, first, to stimulate granulations and thus favor healing, for the purpose of disinfection, thus rendering the pus as little septic as possible. The pus from this abscess has been pretty healthy, and has had no offensive odor, and we therefore have not used injections.

We have examined the pus for the presence of hepatic tissue. Dr. Fenwick has maintained that it was possible to find liver cells in the pus from hepatic abscess. You well know that the liver cells are very granular, even in a physiological condition, and it is difficult to recognize the hepatic cells when broken down and mixed with the products of suppuration. I have been unable to obtain any evidence of hepatic cells in the pus from this abscess, but our examinations will be repeated. The majority of observers have not confirmed the view of Fenwick.

Phlebitis.

I shall next show you two cases of a condition

which is not extremely frequent. I allude to phlebitis. Both patients are suffering with phlebitis of the left lower extremity. The first patient was admitted to the hospital seven weeks ago with apex pneumonia. It is important to note that he was a drinking subject. Eleven days after admission he developed tenderness along the femoral vein, which rapidly extended to the calf. This tenderness was associated with extreme pain and a renewal of the fever.

The second case is that of a man who gives a very imperfect history of himself. The general features of the case are however similar to those of the first case. He was seized a short time ago with pain running down the leg to the calf in the course of the femoral vein. This was soon associated with a certain amount of swelling, some of which you see to-day. In this case the pain has not been so intense, but is more a feeling of numbness and soreness.

What is the cause of this condition? I think that an important feature in the diagnosis of phlebitis is to determine whether it is a local trouble or whether it is an evidence of general septic inflammation. There is no trouble in saying that in the first patient the whole trouble was a local inflammation of this series of veins. I suppose that the etiology of the case was this: the man had been a drinking subject, and was suffering with pneumonia. Both of these conditions tended to interfere with the circulation by depressing the heart and general circulation, and the pneumonia assisted in producing a reduction in the force of the venous circulation; and secondarily we suppose that there was a thrombus formed in consequence of the slowing of the blood-current. It is a curious fact that this disease nearly always occurs on the left side of the body. It is extremely common in any condition in which the circulation is much enfeebled—in typhoid fever, dysentery, and cholera. The last case of thrombus which I have seen was in a case of severe cholera morbus. The femoral artery was closed by a clot which I believe was due to slowing of the blood-current by the drawing off of the serum by the bowels. I do not mean you to infer that the clot blocks up the whole vein. Fibrine accumulates along the wall of the vessel, and tends to block up the vein, and following this there is inflammation of the vein. I told you on a previous occasion that if the venous circulation is partly obstructed, the lymphatics, if free, are capable of removing the fluid, and there has to be considerable venous obstruction, if the lymphatic channels are free, before œdema will occur. In some cases of phlebitis all the symptoms of pain, tenderness, and swelling in the course of the vein, are present without much œdema. This is because the lymphatics are free. In our second case, although the lymphatics have not been involved, the venous obstruction has been so marked that the lymphatics could not take up the exudation. Next to the determination whether the disease is a local one or not is the determination whether or not the lymphatics have been involved. Most recent clinicians and pathologists have decided that lymphatic involvement converts a case of phlebitis into a case of phlegmasia alba dolens. There is much confusion as to what is meant by a phlegmasia alba dolens. The clearest idea to carry in the mind is that it consists of phlebitis with lymphatic involvement. It may occur in connection with typhoid fever or other exhausting disease, but is most frequent in the puerperal state.

Suppose that the inflammation of the vein is not a local trouble, as in these cases, how may it be caused? The other cause is the transference of a septic embolus to a pocket of the vein. Suppose you have dysentery, there is ulceration of the bowel, and phlebitis occurs, what is its probable cause? In an inflamed vein in the neighborhood of the ulcer, a thrombus has formed, which has in turn given off an embolus, which in a large majority of cases is septic. This passes into a vein of the extremity, creates irritation, and produces a septic phlebitis. In the same way, in the puerperal states, there is the formation of a certain number of clots in the uterine sinuses. If these are associated with some septic condition, there may then be a thrombus which may give rise to emboli of a septic character. In puerperal phlebitis the inflammation may be non-septic, and the main point is to determine whether or not the process is septic. The two forms of inflammation give rise to the same local symptoms, and the diagnosis must be based upon the general symptoms of pyæmia or septicæmia; that is to say, hectic fever with a daily rise and fall of temperature and intermittent sweats. In the case alluded to a few minutes ago, a case of puerperal phlebitis, the important point which could not be settled for several days was whether the phlebitis was septic in character or simply a local trouble. The case was somewhat confusing, because there was profuse sweating all the time, and a temperature curve from 100 in the morning to 104 in the evening. That was not the temperature curve of septicæmia, which usually ranges from 99 to 103, and is associated with intermittent sweating, flushes, and rigors.

I hope that I have made clear the importance of differentiating between local and septic phlebitis. If it is a septic condition, we must look out for secondary consequences, such as abscess in various organs and general septicæmia. In local phlebitis, you can give a prognosis of recovery in a comparatively brief period.

Let me say one or two words in reference to treatment of local phlebitis as we have it in these cases. The best treatment is, I think, the conservative. In these cases the limb has been enveloped in cotton, and the patient has been kept perfectly quiet. It is advisable not to do too much in attempting to arrest the inflammation by blisters, iodine, mercury, and so on. If the pain is severe, hot fomentations, as of laudanum and water, may be employed, and in very severe cases lead-water and laudanum may be used; but lead-water is objectionable because it hardens the skin and prevents a careful determination of the amount of induration due to the trouble in the veins. Internally, opium is to be used freely to relieve the pain. Morphia may be used hypodermically, but it is to be borne in mind that in septic cases, hypodermic injections are liable to produce localized abscesses. In such cases it is better to use opium by the mouth or rectum. We also use tincture of the chloride of iron and quinine. Quinine has a tendency to arrest inflam-

matory processes in general, and it certainly has a positive effect in septic inflammation.

If the phlebitis is septic, is there anything else to be done? I really think that it does not make much difference. At present, some favor the use of small doses of carbolic acid. Personally, I think that you cannot antagonize a septic poison in the blood by such means. The plan, I think, should be to maintain the crasis of the blood and the constitution of the tissues. If the character of the cells can be kept up to a certain point, the septic materials cannot attack them. We have an illustration of this in phthisis. We know how often phthisis is arrested. I grant that occasionally treatment will do this, but more commonly the cure is spontaneous, and is because the process of repair exceeds the process of wasting. The patient is, perhaps, removed to a climate where he can have exercise, he takes plenty of food, and the improvement in nutrition will give such a vital capacity in the cell that it will cease to break down. So in septicæmia, if you can increase the vitality, you can prevent the spread of the poison. Beyond this, I think that nothing can be done.

MEDICAL SOCIETIES.

PHILADELPHIA CLINICAL SOCIETY.

Stated meeting, May 22, 1884.

The Vice-President, Dr. Amy S. Barton, in the chair.

The first paper was

Removal of a Lymphoma from the Neck—Recovery.

By Dr. Susan P. Stackhouse.

The patient was a woman 40 years of age. Sixteen years ago she first noticed a small tumor, just below the left ear; there was no inconvenience caused by it except the projection of the earring. On seeking medical advice, she was told there was no danger attending the growth so long as it remained undisturbed. It increased in size very gradually, and was attended with no pain nor tenderness. The patient entered the Woman's Hospital of Philadelphia, and was operated upon by Dr. W. W. Keen, October 17, 1884. The tumor then extended from the ear to an inch below the cricoid cartilage, and was 2½ inches in width; from its size it began to interfere with deglutition and respiration. The skin was not involved, but the veins were enlarged, and two pulsating vessels could be felt to enter the tumor. The growth was movable, to a certain extent, firm and inelastic.

Operation.—After the patient was etherized, an incision 4 inches long was made, care being taken to avoid the external jugular vein, which crossed the growth. The hemorrhage, which was quite profuse, was arrested by hæmostatic forceps and ligatures; it being necessary to ligate *eighteen* vessels. On account of the vascular nature of the growth, and its loose connections with surrounding structures, the adhesions were broken up with the grooved director. The tumor was intimately connected with the internal jugular vein for nearly 3 inches, and very careful dissection was required in order to preserve the integrity of that vessel. Nearly all the deep structures of the neck were exposed on the removal of the tumor. The wound was closed by wire sutures, after the introduction of a drainage-tube and a bundle of horse-hairs. The operation required one hour, and the patient became very much exhausted, but reacted very quickly after a hypodermic injection of brandy.

The wound was dressed on the following day, on account of there being considerable oozing of blood; the tube was then removed, the horse-hairs being left. After this the patient did very well; temperature never reached 100°; the only difficulty being some trouble in deglutition for three or four days. On the eighth day, when the dressings were removed, scarcely soiled, the wound was found closed, with the exception of one small point. The patient was discharged from the hospital two weeks later, in good health, the cicatrix being only a slight disfigurement.

Dr. Stackhouse also reported "A Case of Complete Retroversion of the Uterus from Distension of the Bladder."

July 22, 1884, while serving as interne at the Woman's Hospital of Philadelphia, I was called to a woman who was said to be dying. The patient was 35 years old. Temperature normal, pulse 100, feeble and irregular, respirations gasping and rapid, face anxious, eyes injected. She did not complain of any pain, only a constant desire to urinate; said that she had passed urine repeatedly, and pressure upon the abdomen caused some flow of urine. The abdomen was greatly distended, the patient saying that the enlargement had existed for ten days, and had come on suddenly without any previous illness; did not think she was pregnant. On examination of the abdomen, its enlargement was found to be due to an oval, elastic tumor, extending from the symphysis pubis to within two inches of the ensiform appendix. It was regular in outline, and in no way resembled a pregnant uterus. On examination per vaginam, I found that the tumor had no connection with the uterus; that organ was completely retroverted, the fundus being only a short distance from the vulvar orifice, and the cervix in front of the symphysis pubis. The uterus was somewhat enlarged, and perfectly immovable. The patient insisted that she was not pregnant, and said that four months ago her abdomen became enlarged suddenly, she was unable to urinate, and the physician, on passing the catheter, drew off a large quantity of urine, and the condition was relieved. I therefore passed a rubber male catheter, No. 16 French, and drew off fifty ounces of very pale, clear urine; it was neutral in reaction, sp. gr. 100.2, containing a small quantity of pus, but no albumen.

The relief was very great; the respirations were no longer gasping, and the face lost its anxious expression. A soft French catheter, male, was introduced into the bladder, and kept in place by perineal bands of adhesive plaster. The paralysis of the bladder was complete, and lasted for a week. It was found impossible to restore the uterus to its normal position by manipulation, so the patient was told to place herself in the knee-chest position for five minutes at a time frequently during the day. At the end of ten days

the patient was perfectly well, urinated without difficulty, and the uterus was restored to its normal position.

Dr. Louise S. Blum then read the report of

A Peculiar Case of Death from Asphyxia, Caused by a Plate of Artificial Teeth Impacted in the Trachea.

The literature on the subject of foreign bodies in the air-passages is exceedingly rich in rare and peculiar cases of extreme interest. Almost every physician has been called upon, at least *once* in the course of his practice, to remove some article from the air-passages of a child who has made the mouth a common receptacle in place of the pocket. In such cases there have been found and removed pins, needles, marbles, fish-hooks, rings, buttons, button-moulds, pebbles, sticks, pens, slate-pencils, ears of rye, wheat, or barley, fruit stones and seeds, and numerous other articles. Neither, it seems, is this reprehensible practice confined to children alone, for a number of the above-mentioned articles, as well as some others, have been removed in the cases of men and women. Buckley, for instance, removed a copper umbrella tip from the larynx of a woman; and in two other cases on record, a puff dartand a hard rubber tube were similarly removed. Instances of pieces of the various kinds of food entering the air-passages during deglutition, are of such frequent occurrence that that they receive no mention. Of far more importance and interest to the medical profession is tne fact that tracheotomy tubes and corroded pieces of the same, hypodermic needles, and various surgical instruments, or portions thereof broken off during operation, also unsecured corks for keeping the jaws apart, leeches carelessly applied, sponges, etc., have all, at various times, been found in the respiratory tract. Scarcely less interesting is it to read that matters vomited during anæsthesia or unconsciousness during apoplexy or epileptic attacks, as also regurgitated chyme, curdled milk, worms from the alimentary tract, pus from tonsillar, post-pharyngeal or epiglottic abscesses; necrosed nasal, palatal, and cranial bones, and laryngeal cartilages, have all at various times acted as foreign bodies in the air-passages of man. Even a lymphatic bronchial gland, one inch in length, has been known to have caused death by becoming impacted in the rima glottidis during a violent fit of coughing. A still more remarkable case is that recorded by Ruehle in "Kehlkopfkrankheiten," in which the epiglottis of a man was drawn into the upper orifice of the larynx during deglutition, where it became firmly impacted, and acting as a foreign body caused death. During operations upon the teeth and mouth, one or more teeth, or crushed fragments of the same, have frequently fallen into the windpipe. More rarely a number of artificial teeth, connected by a metal, have become dislodged during sleep, and were drawn into the larynx or trachea by the attempts made at respiration. This accident has also occurred during deglutition, although in that case they are usually swallowed with the bolus of food, and enter the stomach. Still more rarely has this accident occurred where a number of artificial teeth were attached to a plate. The only case of the kind on record, to my knowledge, is that reported by Mr. Henry G. Croly, of Dublin, cited by Prof. Gross, in which instance seven artificial teeth, set in gutta percha, were arrested at the juncture of the larynx and trachea. The case which forms the subject of this paper is a parallel one, but is far more peculiar than the majority of such cases are likely to be, from the fact that the accident occurred in the course of an acute disease, and was not suspected until after the death of the patient.

On February 18, 1883, I was asked to call upon Caroline H., æt. 25, widow. Examined the patient carefully. Temperature 104° F., pulse 128.

On the following day I called twice, taking the morning and evening temperature, which, together with the previous history of the case, confirmed my diagnosis of malarial fever of the remittent type.

February 21. Temperature 103° F., pulse 115.

February 22. Temperature 102° F., pulse 110; within an hour after my visit I was hastily recalled to the patient, the messenger saying that she was dying of hemorrhage. I found the patient, her face livid and convulsed, held down by *four* people. As I reached the bedside she gave a few gasps expired, and before anything could be done for her relief. With the last gasp of the dying woman, and the consequent dropping of the lower jaw, the mother noticed the loss of the teeth, and called my attention to the fact. Thinking that they had dropped out of the patient's mouth during her struggles, I advised a thorough search of the floor.

In the evening I called again to ascertain all possible details of the last hour of the patient's life, and found that immediately after I left she had taken her medicine and composed herself to sleep. Suddenly the nurse, who was looking out of the window, was startled by a peculiar, barking sound. On turning round and seeing the patient with eyes rolled up and face fearfully convulsed, she became frightened and ran down stairs for help. By the time the others reached her side she was violently convulsed, her face livid, and blood flowing from her mouth. This, as I had readily ascertained, was from the bitten tongue, and was small in quantity, although it gave rise, in the minds of the family, to the idea of hemorrhage. The convulsive movements, though violent, were of short duration, and had about ceased as I entered the house. Upon inquiring for the teeth, I learned that, although the room had been swept, they had not been found; after hearing this fact, together with the details of the case, I felt convinced that the teeth had become dislodged during sleep, and had entered the air-passages and thus caused death. A post-mortem examination was made the next day, and revealed the following: The heart and lungs, otherwise normal, presented the usual signs of death from asphyxia. The liver was congested and softened. The spleen was enlarged and very much softened, thus verifying the diagnosis of malarial fever. All the other organs were found in a normal condition. This much having been ascertained, search was made for the missing teeth, which were found in the trachea, about *two* inches below the larynx. The plate was of the usual size, of vulcanite, and had *four* teeth attached to it; it was so firmly wedged that force, little short of violence, was required to remove it. In the vigorous efforts made

to dislodge the plate, one of the teeth, which seems to have been imbedded in the walls of the larynx, was broken off and left behind.

MARY WILLITS, M. D., *Reporting Secretary.*
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PATHOLOGICAL SOCIETY OF PHILADELPHIA.

Thursday evening, May 14, 1885. The President, Dr. Shakespeare, in the chair.

Fracture of the Pelvis; Rupture of the Bladder; Fracture of the Forearm.

Presented by Dr. De F. Willard.

H. C., æt. 23, was admitted to the Presbyterian Hospital, 3, 27, 1885, having fallen a few hours previously under a backing locomotive, which, when stopped, held him firmly fixed beneath the ash-pan. In starting the engine to extricate him, he was again rolled by this ash-pan, which was not more than fifteen inches above the cross-ties. On admission, no lacerations of the skin were visible, but the contusions about the pelvis were well marked. The pubic, lower abdominal, and upper femoral regions were extremely ecchymosed. The right arm and left iliac regions were emphysematous and painful. There were no evidences of urinary infiltration in the perineum or scrotum, although the latter was blackened by ecchymosis. Crepitus was marked at every movement of the pelvis; the left trochanteric region and buttock were much flatter than upon the right side, and pressure increased the deformity so much that it seemed probable that the head of the femur could be pressed into the pelvis through the acetabulum. This was not so, as was subsequently proven, but was due to the great mobility of the anterior pelvic fragment. At least two lines of fracture could be discovered at the iliac crest, and one at the pelvis. Both bones of the right forearm were also broken in the lower third, and there were many contusions of the trunk. A catheter easily introduced into the bladder secured many blood-clots, and about two ounces of urine. Shock was not excessive, and although restless during the night, only small doses of morphia were necessary. On the following day the mind was perfectly clear. Vomiting soon occurred, but unaccompanied by severe abdominal pain. Diligent search was made for extravasated urine, as only half an ounce was found in the bladder; but the only suspicious territory was to be found in the left iliac region, and here the ecchymosis and contusion was so great that no positive conclusion could be reached. Temperature 102.1° F., pulse 150. Death occurred on the third day from peritonitis. Post-mortem.—Complete separation of the symphysis pubis was found, the left fragment with its sharp end having made an opening in the anterior wall of the bladder about one-eighth of an inch in diameter, through which aperture a small quantity of urine—say two or three drachms—had found its way into the connective tissue, and lay just behind the symphysis. Another fracture extended from behind the anterior superior spinous process downwards just behind the acetabulum, through the ischium; another ran from the centre of the crest into the obturator foramen, and the sacrum was torn from the ileum at its synchondrosis. There was blood in the peritoneal cavity, but no pus, and but little lymph. The examination showed that the small collection of urine could not have been reached by puncture, and that the small amount of urine obtained by catheterization was due to suppression, and not to its extravasation. The kidneys were much congested. The fractures were undoubtedly produced by the lateral pressure in rolling, which reduced the patient's transverse diameter from seventeen to fifteen inches.

Dr. Wharton said that there were several points of interest, and especially with regard to the urinary symptoms. Did he understand Dr. Willard to say that the catheter had been passed and no urine withdrawn?

Dr. Willard replied, several times, evacuating only a few drachms each time.

Dr. O'Hara would ask the reporter as to the condition of the kidneys. As total suppression of the kidney secretion was evident, it would cast some light upon it to know the pathological expression of shock in the actual condition of the kidneys. Shock is very often a general and unmeaning term, but if there was an actual diseased condition, whether recent or old, it would be well to record it, in reference to the details of the case. Belfield in "Diseases of the Urinary and Male Sexual Organs," had, to his mind, negatived many cases of shock, and proved that they depend on "negative pressure," or "hyperæmia ex vacu." Dr. Belfield seemed to the speaker to have clearly made out the matter in reference to the kidney on anatomical and pathological grounds.

Dr. Willard answered that the kidneys were very much congested.

Dr. Nancrede differed *in toto* from Dr. O'Hara, in his explanation of the suppression of urine in this case. It was well known, experimentally as well as by post-mortem evidence, that in "shock" an enormous accumulation of blood in certain instances took place in the abdominal viscera, due to paralysis of the abdominal vaso-motor system of nerves. Pure congestion, if sufficiently marked, was competent to produce suppression even in a healthy kidney, AND THIS SUPPRESSION TOOK PLACE BEFORE ANY CATHETERIZATION WAS ATTEMPTED, as was distinctly stated by Dr. Willard. In Dr. Willard's cases Dr. Belfield's "negative pressure" theory was a mechanical impossibility, as it required a previous *retention* of urine either in a bladder with healthy walls, or in one whose parietes were rigid, and could not therefore collapse. Neither of these conditions obtained in the case under discussion, and the kidneys had practically ceased to secrete before any catheter was even near the patient for introduction, since he was admitted to the hospital *some hours* after the accident, when only "about two ounces of bloody urine" was evacuated. Even with regard to the cases where the mechanical conditions were favorable for "hyperæmia ex vacu," he doubted if this was always the correct explanation. The theory was not new, and he thought was carried far beyond its legitimate limits by Dr. Belfield, with whose work, he would assure Dr. O'Hara, he was peculiarly familiar.

(*To be continued.*)

EDITORIAL DEPARTMENT.

PERISCOPE.

Traumatic Epilepsy Cured by the Use of Trephine.

Dr. J. R. Weist thus writes in the *American Practitioner*, May, 1885:

The very valuable paper of Dr. W. T. Briggs, of Nashville, Tenn., on the "Surgical Treatment of Epilepsy," read at the meeting of the American Surgical Association in 1884, and published in volume ii. of the Transactions of the Association, having brought the question of the propriety of trephining for the cure of epilepsy again prominently before the profession, the following brief report of a successful case may be of some interest:

Frank Mitchell, nineteen years old, was struck at the upper and outer margin of the right frontal eminence by a number one shot, January 12, 1878. He was brought to me soon after the injury. The small opening in the scalp was enlarged and the flattened shot found slightly imbedded in the bone. The shot was removed, some headache was complained of for a few days, but the wound soon healed. About two weeks after the injury, while riding in a wagon, he had a severe epileptic seizure; soon after this the wound opened, and did not entirely close for about five months. During this period frequent headaches were complained of, and several small scales of bone were removed. About a year after the accident a second epileptic seizure occurred, and attacks followed, at first every two or three weeks, gradually increasing in frequency during four years. Then for two years, and up to the time of operation, they occurred two or three times per week, generally of severe character. He was still subject to frequent headaches, worse on the right side. The epileptic seizures were preceded by increased pain in the head, and a tendency to turn the head to the right. No special impairment of the mental functions was observed. The slightly depressed cicatrix, about half an inch in diameter, was tender. On April 6, 1885, assisted by a number of medical gentlemen, a triangular flap was raised over the seat of injury, and a button of bone three-fourths of an inch in diameter removed by the trephine. The cicatricial tissue of the scalp was found adherent to and to pass through a small opening in the bone, which was very thin, and attached to the dura mater. After the button was removed, it was found that the centre-pin of the trephine, which had been protruded but very slightly, had not been placed on bone, but on cicatricial tissue, and it is probable that the point had penetrated the dura mater. A drainage-tube was placed in the wound, the flap held in place by two or three sutures, and a light compress applied. The next morning the patient was doing well, but it was observed that the dura mater was raised through the opening above the level of the bone and pulsated strongly. These phenomena had disappeared on the next day, when pus escaped freely from beneath the flap. On the third day the pulse beat rapidly, pain in the right side of head was complained of, and slight symptoms of paralysis appeared on the right side of the face and in left arm and leg. These unfavorable symptoms increased. The pulse and respiration became slow, with complete motor and partial sensory paralysis on the left side, with marked comatose symptoms. Discharges involuntary. All the signs of cerebral abscess were present, but operative procedures were delayed because of its apparent location. The motor centres of the arm and leg are about two inches posterior to the opening in the skull, and they were evidently involved.

Finally, thirteen days after the operation, Dr. Bond, who had charge of the case during my absence from the city, freely divided the dura mater and brain through the opening already made in the skull; considerable pus was discharged, and in five hours motion appeared in left leg and arm. Pus continued to discharge for several days, then serum for a few days, when the flow ceased, and the wound was allowed to close. In a few days all unfavorable symptoms save a slight headache disappeared. The patient was discharged from the hospital, and his condition still remains good. He has had no epileptic seizure since the operation; and, having been free of an attack longer than at any time during six years, there is reasonable ground for the hope that a cure of the epilepsy has been effected. He will be kept for some time on the use of sodium bromide.

By giving attention to the facts herein recited regarding this case future errors may be avoided. Probably the center-pin of the trephine wounded the dura mater; this was followed by an effusion of blood beneath it, shown by the pulsating tumor, and inflammation and suppuration. By using the trephine through an opening in a disk of wood or leather, the use of the center-pin would not have been necessary. Perfect drainage was not provided for, and another preventable cause of inflammation of the membrane and brain allowed to be present. It would, perhaps, have been better practice to have entirely removed a portion of the scalp corresponding to the opening in the skull. In this way perfect drainage would have been effected, and as the dura mater would have been under direct observation, it would have been incised as soon as made prominent by the blood or pus beneath.

Thus through our mistakes may we acquire wisdom.

Multiple Saroma of the Skin: Treatment by Hypodermic Injections of Fowler's Solution; Recovery.

Dr. Frederick C. Shattuck thus writes in the *Boston M. and S. Jour.*, June 25:

July 26, 1883, K. B., thirty-one years old, was admitted into the Massachusetts General Hospital. Her health had usually been good, and

she had worked at dressmaking up to the time of admission. Seven months before that date she began to suffer from pain along the lower jaw, and soon after noticed swelling behind the angles of that bone. About two months later nodules appeared in the skin over her right shoulder, then on her right arm, next on the left, next on the abdominal wall. She thinks that the appearance of the nodules was preceded by local tenderness, and followed by discoloration. About three weeks ago she noticed that her face was fuller than normal, and she began to suffer from pain in the cardiac region. She was somewhat short of breath on exertion, and reported that she had lost decidedly in strengh, thougth not in flesh. The bodily functions were in fairly good order. The pulse was 120, regular, rather weak.

On examination, it was noted that the patient was pale, with some œdema of the eyelids and face, preponderating on the right side. Scattered throughout the skin of the upper extremities and the body as far as the umbilicus were hundreds of nodules, mostly about the size of a pea. Over the inner aspect of the arms the nodules were discrete, not raised above the surface, slightly tender on pressure; the skin could be wrinkled over them, and was not discolored. On the outer hand, over the shoulders, outer aspect of the arms, breasts, upper abdomen, and back—though in the latter situation to a less degree—the nodules were so thickly sown as to form large masses or plates, very hard and but very slightly tender; the skin covering this could not be pinched up or wrinkled, and was markedly erythematous, with slight scaly desquamation of the epidermis. In the legs a very few nodules could be felt, and there was no erythema. The glands at the angles of the jaw were enlarged, but those of axilla and groin were apparently normal. Thorough examination failed to reveal any material modification of the great viscera. I made the diagnosis of multiple sarcoma of the skin, and soon after Drs. White, Wigglesworth, and Tilden were kind enough to accede to my request to see the patient, concurring in the diagnosis.

General tonic treatment was prescribed at first, but Köbner's brilliant success in a similar case with the subcutaneous use of Fowler's solution induced me to adopt his plan toward the end of August. An injection of four minims, diluted with an equal quantity of water, was given once daily, deep in the thigh. September 15th Dr. Tarbell resumed charge of the wards, and soon after increased the injection to six minims. The general health of the patient improved, a few fresh nodules appeared, but the old ones disappeared in much larger numbers, and November 3d she was discharged from the hospital, in order that she might work a portion of her time. She came daily to the hospital, however, for her injection until she was furnished with a syringe and taught its use, and treatment was persisted in steadily till the middle of March, when I opened an abscess in the thigh, the only one which formed during the whole time. A few nodules still remained, but the masses which filled the skin over the breasts, abdomen, and outer side of the upper arm had entirely disappeared, and during the past year she has been under observation from time to time without any treatment whatever, and has worked steadily at her trade. I have seen her within a few days, and she remains perfectly well to all appearance.

Early in 1884 I showed her at a meeting of the Medical Improvement Society, but have purposely allowed a year to elapse before reporting the case, in order that there might be no doubt as to the result.

Cases of multiple sarcoma of the skin are rare, and the authorities on diseases of the skin have little to say on the subject. All agree that the prognosis is absolutely unfavorable, and the course generally a rapid one. Köbner's is the only case recorded up to date, so far as I am aware, in which recovery took place. I now regret that one of the tumors was not excised and examined microscopically, as was done by Köbner. The patient was extremely averse to the operation and preferred to wait, promising that she would make no objection if she got worse. To this delay I consented, having very little faith that treatment would prove of any avail. Still, even without the evidence of the microscope, I think there can be no doubt as to the diagnosis. The experts were unanimous, and I had previously seen two other cases very similar, except that they ended fatally. Was the cure really attributable to arsenic? If so, would the drug have acted as well administered in the usual way by the stomach? These are questions which can only be answered by extended experience. It is interesting to state that ten days after the arsenic was stopped the urine was examined for its presence by Professor Wood with a negative result.

False Reduction of Hernia.

The *London Med. Record* tells us that Dr. P. Berger gives, in two papers which have appeared in the *Revue de Chirurgie*, some illustrative cases and remarks upon this interesting subject.

Commencing with the account of a case of Arnaud's which occurred in 1730, he gives in detail eleven cases which have been published, and one which came under his own notice. Of these twelve, it appears that six were inguinal and six crural herniæ, and in an appendix are added three cases of an allied nature, communicated by Professor Azam, of Bordeaux. Of these, only two (Arnaud's and Berger's) recovered, and Berger's died after ten days, though the reduction was effected.

On anatomical examination, he finds the hernial sac and the proper course of the hernia empty: in the deepest part of the latter is the bend of the strangulated intestine, folded back into the cellular tissue of the iliac fossa in the case of an inguinal hernia; behind the pubes, in the cellular tissue of the pelvis by the side of the bladder, in the case of a crural hernia. It is still pressed upon by the neck of the sac, which may have been divided or not, and it makes its way into the subperitoneal connective tissue, through the opening made by the deep incision of the operation for the relief of the stricture. Sometimes there may be a peculiar anatomical arrangement, such as an exposed testicle, or a fibrous cord like that of the umbilical artery, or adhesions between the intestine and the neck of the sac, which explains the difficulty the surgeon may have had to encounter during the operation, and be a reason why the

intestine passes along the course which manipulation and instrumental interference have prepared.

In almost all the necropsies it was found that the cause of strangulation, or at least the obstacle to reduction, had not been removed by operation. Moreover, it is evident that the surgeon often has himself prepared the "false route" into which he has forced the intestine; and Dr. Berger urges that the injudicious force used in attempting reduction is the principal factor in this complex action, the result of which is the substitution of an internal for an external strangulation.

He discusses the symptoms which accompany or follow this accident. Of course, the ultimate absence of relief to the ordinary symptoms of obstruction makes this obvious; but it is important to notice any features by which the failure can be detected early, and he quotes freely from the experience of Pelletan and others, that the feeling of fullness and firmness of the intestine ought to indicate a state in which no danger exists of the accident occurring when this condition persists after a supposed division of the cause of strangulation. Besides this, the finger introduced into the course of the hernia does not pass freely into the abdominal cavity. The intestine can be distinguished, and may be found not to be freely movable in the peritoneum, but fixed and presenting itself to the finger always in the same position, and in the same character. The author says truly that, the longer the discovery is postponed, the more difficult and obscure the case and its treatment become.

The practical conclusions arrived at may be summarized thus:

1. The surgeon should bear in mind the possibility of the accident and its usual origin from incomplete division of the stricture, or from division of tissues which are not the real cause of strangulation, and from pressure during taxis having been too long or too forcibly attempted.

2. The persistence of symptoms of strangulation points to a false reduction. The special symptoms and signs have been indicated, but two points are specially worth notice. *a*. When the operation has been done several hours, or even a day or two, without the symptoms of strangulation ceasing, can the surgeon distinguish such a false reduction from those cases of pseudo-strangulation due to paralysis of the gut after intense or long-continued pressure? The answer is difficult. False reduction is not followed by even temporary relief of any kind; moreover, the pain is localized, more or less, and the swelling can be made out with careful manipulation. Then, on searching by the finger in the wound, the intestine is found distended and fixed in position, and the seat of strangulation is not relieved. *b*. When we are clearly in the presence of a false reduction, can we be sure that it is due to displacement under the peritoneum rather than to any other cause? The other cause indicated is adhesion of the gut to the sac. This can only be answered by the careful exploration of the wound.

3. When the existence of the false reduction is made certain, it must be put right, and to do this it is necessary to draw down the gut from its false position to learn the nature of the obstacle, and then to reduce the hernia after proper division of the stricture.

Septicæmia from Human Bite: Recovery.

Dr. M. Whiting thus writes in the *Peoria Med. Monthly*, May, 1885:

In view of the attention that has been recently given to the poison of human saliva, under certain conditions, I will report a case which occurred in my practice a year ago.

D. W. German, aged twenty-two, married, sent for me in January, 1884. On visiting him, I gained the following history: Two weeks previously, while engaged in expelling an unwelcome visitor to his marital couch, he received a bite over the second phalanx of the middle finger of the right hand. The bite upon the dorsum was of insignificant importance and soon healed, but that upon the palmar surface remained an open sore until the date of my visit.

On examination, I found an ugly, foul sore over the second and third phalanges of the finger, the edges were thick and dark, while from the wound exuded a thin and very offensive purulent discharge. On probing, I found the bone carious and exposed. The whole finger was tensely swollen and had been extremely painful. The hand was of a dark-red color and œdematous to the wrist, while the arm was somewhat swollen, slightly œdematous and painful to the shoulder. Red lines marked the internal aspect of the forearm. Axillary glands enlarged and tender upon pressure.

General Condition.—Tongue furred, bowels constipated, no appetite, high fever, temperature 103, pulse 120, weak and thready. Several hours before my visit he had had a severe chill, which was followed by a decided increase of fever. Having lost sleep for several nights previous on account of the pain in the finger and hand, his appearance was haggard and anxious. At the time of my visit he was literally bathed in a copious perspiration, which had come on an hour or two before.

Cleansing the wound as well as possible with a carbolic acid solution and ordering flaxseed poultices, I prescribed four grains quinia sulph. every four hours, also a laxative, and a mixture containing ten drops of muriated tincture of iron, with stimulants. This treatment was continued for three days without any perceptible change in the patient's condition. During this time he had frequent chills, followed by an increased temperature, and a large blister appeared over the first phalanx, extending back to the metacarpo phalangeal articulation of the finger, from under which offensive pus could be pressed into the wound. At this time I requested Dr. T. M. McIlvaine to visit the patient and advise concerning the amputation of the finger, which I had urged from the beginning of my attendance. My consultant advised delay in the operation, giving as his reasons therefor, the extremely bad condition of the patient, and apprehension that the exposure of a large fresh surface would only give a freer entrance for the septic poison into his system. He advised the continuance of the quinine, substituting syr. ferri iodidi in twenty-drop doses for the tincture of iron, and the application of charcoal and yeast poultices to the finger. This treatment was vigorously pursued for the ensuing ten days, within which time I removed the second phalanx of the finger.

At the end of three weeks the patient's condition began to improve, the sweats grew less, fever abated, appetite returned, and he was able to leave his bed. The finger, however, did not improve much, except that the discharge was lessened and not so offensive. The patient now agreed to the removal of the offensive member, and accordingly, with the assistance of Dr. McIlvaine, I removed the finger and head of the corresponding metacarpal bone; the tissues making the flap were wonderfully thickened, and so soft that I did not believe a suture would hold; still, to my surprise and gratification, the wound healed very quickly, and in a few days was entirely closed. From that time on he made a rapid recovery, and in a few weeks more resumed his work.

Treatment of Spinal Irritation.

Dr. George W. Ryan read a paper on this subject before the Ohio State Medical Society, June 4, 1885. The essayist stated that he proposed to consider this condition more particularly in its relationship to joint troubles and the cases that come especially under the care of the orthopedic surgeon. Of the various names this affection had been given, he thought the term spinal irritation the best, as it was expressive and comprehensive enough whatever the pathology might be. Its influence in arthropathies had been pointed out by Gibney, Shaffer, and other American writers in recent years. He did not believe it essentially a hysterical condition, but rather that hysteria was the result of it. It was often mistaken for Potts' disease of the early stage. Its influence in deformities and apparent disease of the joints was the widest field in its secondary troubles. The essayist stated that he had seen cases which had worn apparatus for months which were promptly relieved by treatment directed to the cause of the deformity; others in which this condition had not been recognized had suffered when prompt relief could have been given had it been intelligently applied. He believed it would be a sound rule to examine the spine in every case of joint trouble where the disease was not unmistakable. The "Brodie" joint often resembled the joint of chronic disease, but was generally characterized by the rapidity of its onset, and generally the absence of the characteristic symptoms of bone lesion, but often extreme tenderness. Deformity nearly always accompanied it. He had not been able, in many cases, to find the "tender points" spoken of by some writers. The hip, the knee and ankle, were the joints generally affected by this condition. Club-foot was occasionally found with a neurotic cause. The essayist read the report of two cases, one in which the spinal trouble followed acute articular rheumatism. The patient had been confined to her bed and invalid-chair for more than two years; was unable to walk but a few steps. The case was so far relieved in six weeks that she was enabled to get about very well, and has continued to improve. The other was of five or six years' standing, in about the same condition as the first, and was relieved in about the same time. The treatment in both cases had been the Paquelin cautery, faradism and spinal support. The essayist believed that the Paquelin was better suited to cases that required treatment extending over several weeks, but he had seen prompt results from the large fly-blister in the more acute cases. Faradism was of great service where there had been loss of muscular power. Massage had been used to a limited extent in the cases. No medicine except tonics were employed. The speaker thought the value of the spinal support had been underestimated; he had found it of considerable value, used solely as an adjunct. Theoretically and practically, he believed it indicated in most cases, and the patient finds it gives relief to the burning sensation experienced after exertion.

Empyema Treated by Daily Aspirations.

Dr. Dan Millikin, of Hamilton, read a paper on the above subject before the Ohio State Medical Society, June 4, 1885, wherein he approached the subject only in the line of a theorist. He wished only to throw out a hint of a new line of treatment, and sought rather to be instructed than to instruct. He reported a case of pneumonia, which, while resolving, became pleuro-pneumonia, and the left pleural cavity became filled with pus. His distress being very great, the doctor made all haste to aspirate, obtaining a great quantity of horribly offensive pus. The treatment consisted of a daily withdrawal of pus until the patient complained of tightness, oppression, or pain. He then entered his protest against further aspiration, and a quantity of some antiseptic fluid was thrown into the cavity of the chest. Fluid was withdrawn and injected with each sitting until it returned clear and limpid; at the end of the sitting it was so thoroughly withdrawn as to leave the patient in some slight distress. The recovery was rapid and complete notwithstanding that the patient had been reduced by a long illness before the development of the empyema. He reported a second case. Pleura filled with pus in very tuberculous patient. Daily aspirations healed completely the pleural trouble, though he was at the same time dying of tuberculosis.

The doctor thought there was an advantage in a small opening in the chest; other things being equal, a small hole is better than a large one, and one better than two. That it is better for the pus to flow only when the doctor is present, and the clothing to be clean in the intervals. He thought it best to have the orifice slanting or valvular. He recommended care to keep the drainage-tubes from slipping into the cavity. By means of the aspirator the lung was subjected to a daily stretching, such as it could not have had by any other means convenient, and not at all with a free opening of the chest. By leaving a slight vacuum after each sitting, he occasioned a gradual expansion of the lungs and contraction of the chest, and caused the mediastinal border to make a convexity towards the affected side of the chest, and give the sound lung more room. Gravity cannot coax pus out of a pocket; the aspirator can.

Dr. P. S. Connor, of Cincinnati, said he had seen aspiration succeed, and he had seen it fail. He had seen patients run down hill after repeated aspirations and recover when a free aspiration was made.

Dr. Joseph Ransohoff, of Cincinnati, has dis-

continued aspirating for empyema. All the cases upon which he has operated have died when tuberculosis was present. He mentioned a case of his where a drainage-tube was lost in the chest for fifteen days with no special harm. He thinks early free incision will save most cases.

Dr. Kinzman, of Columbus, spoke in favor of free incision for empyema. He operated as soon as aware that it was purulent. He is not fearful about air getting into the pleural cavity.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——In a recent reprint Dr. J. H. Musser, of Philadelphia, describes three cases of idiopathic anæmia. He concludes with a judicious hint as to the prevalence of the disease:

It had been thought because in parts of Switzerland the inhabitants were so frequently affected with idiopathic anæmia, it was an endemic disease. It will be seen that three places in this country give nearly all the cases, and yet we believe, for reasons entirely apart from endemic influences. Thus fifteen of the cases were observed in Philadelphia, thirteen in Canada (Montreal and Toronto), eight in Boston, and the remainder in separate localities. This is to us curious, and yet readily explained. In each locality the great attention paid to blood diseases was apparently more influential in recognizing the disease.

——Dr. W. W. Keen, of this city, has set forth the advantage which vivisection has been to medical science in a lecture entitled, "Our Recent Debts to Vivisection." He concludes with the just observation:

The sentiments of our own profession, so constantly and so conspicuously humane, are always against inflicting pain; but if in yielding to sentiment we actually increase disease, and pain, and death, both among animals and men, our aversion to present pain is both unwise and actually cruel.

——A description of a case of infectious ulcerative endocarditis and of one of acute pericarditis has been sent us by the authors, Dr. John H. Musser and Dr. George A. Pierson, of this city. They are instructive cases.

——The bromide of ethyl appears to promise well as an anæsthetic in labor. In a reprint before us, by Dr. E. E. Montgomery, of this city, the writer reports 112 cases, in which it was used without any fatality for mothers and with but three deaths in children, none of which could be attributed to its action.

——"The External Therapeutics and the Dietetics of Pulmonary Consumption," is the title of a suggestive paper by Dr. Thomas J. Mays, of this city, reprinted in neat form. The same writer treats of "The Physiological Action of Cocaine and of its Analogue Brucine." Both reprints can be had of Mr. George T. Davis, publisher, Detroit, Mich.

BOOK NOTICES.

A Text-Book of Medical Physics for the Use of Students and Practitioners of Medicine. By John C. Draper, M. D., LL. D., etc., with 377 illustrations. Cloth, 8vo., pp. 733. Philadelphia, Lea Bros. & Co., 1885.

It is rather hard on the already overladen student of medicine to add another to the "auxillary sciences" on which he is required to pass an examination. But the relations of physics to all the exacter sciences are now so numerous and so indispensable for their comprehension that it is not easy to see how it can be avoided. The author is not correct in supposing—as he intimates in his preface—that the subject is a new one in this country. But certainly we have no text-book which treats it as fully as the excellent one he has prepared. It begins with a statement of the properties of matter; then proceeds to its distinct forms as solid, liquid, gaseous, and radiant matter. Energy is treated of as potential and kinetic, and motion as translatory. After these, the special departments of physics are explained, acoustics, optics, heat, electricity, and magnetism, closing with a section on electro-biology. The applications of all these to physiology and medicine are kept constantly in view.

The text is amply illustrated, and the many difficult points of the subject are brought forward with remarkable clearness and ability.

Manual of the Antiseptic Treatment of Wounds. By W. Watson Cheyne, M. B., F. R. C. S., etc. 8vo., cloth. Pp. 146. New York, J. H. Vail & Co.

Those who would like to acquaint themselves, without spending too much time, with the doctrines of antiseptic surgery, will find this little volume just what they require. The author, who is a well-known authority on the subject, begins with the modes of repair in wounds, describes the species of bacteria and the means of their destruction, enumerates the materials employed in aseptic surgery, gives an example of an operation of the aseptic character, catalogues the special dressings in use, speaks of their modifications for country practice and in war, and concludes with a list of the chief antiseptics and the most approved methods of their employment. The illustrations are numerous, and are very neatly printed.

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HEADACHE.

It is such a common thing to hear a person say, "*I have a headache,*" and it is as equally common to hear the reply, "*It will soon pass off,*" and we so constantly find such recommendations for its relief as a cup of tea, or a nap, or "vinegar and brown paper," and we so seldom inquire into the *cause*, unless the headache is so continuously persistent or some other prominent symptoms imperiously force our attention to a close examination, that we reproduce the following remarks from the *Lancet* as well worthy of careful consideration:

"Headache, although so common an affection, possesses a peculiar interest on account of the tantalizing obscurity in which its cause is often shadowed. Depending upon one or two main physiological principles connected with the passage of nervous impulses and the calibre of cerebral blood-vessels, it yet arises in response to so many different stimuli, that, practically, the branches of its original stem of structure, its distributive variations, are perplexingly numerous. Among the forms but recently described and named, though probably as old as art, is the 'academy headache.' Critics and doctors have vied with one another in trying to translate this term according to the rules of medical logic, but have not, so far, been able to agree as to its meaning. In venturing to put forward our own opinion on the subject, we think it best to notice the different circumstances which tend to produce in the frequenter of galleries that general sense of fatigue which is often the precursor of pain, and then to note the special stimulus which brings out of this chaos the formed and local ache. It should be noted that all do not suffer from this form of headache; while of those who do, some are less and some more affected. Fatigue may be the limit of annoyance with a certain class. They are heavy-limbed and heavy-headed, languid, but no more. The forces at work upon them are the warmth of the crowded room, the summer sunshine pouring through the skylights, the listless rotation or circulation, rather than walking, through the rooms, and the weariness of much-divided attention. Being robust and used to go about upon their feet, they soon lose the feeling of languor after its causes cease to act; and if their eyesight be equally healthy, they suffer no strain in these organs. There are other persons, of weaker organization or more sedentary habits, in whom pain quickly follows fatigue, and it is felt, for certain reasons, chiefly in the head. Among these

reasons we must note the fact that in the standing position the blood, driven by a languid heart, reaches the head with greater difficulty than when recumbent. Anæmia is one cause of headache. Anæmia, too, is associated with changes of arterial calibre which constitute the usual cause of megrim. Under these conditions, also, the giddy malaise of a loitering gait is painfully perceptible. Concentrated attention increases the uneasy sensation. The frequently constrained position of the head has its influence. It would be strange, moreover, if ocular movements had no share in the production of this complex indisposition. Let any one converge his eyeballs to an acute angle, as in squinting, or let him direct a sidelong glance of extreme obliquity, and a single effort will convince him of the pain of such muscular effort. No doubt this is the pain of muscular tension, acute and so far abnormal; but it is also possible to induce a similar pain from the strain of too frequent muscular action within the normal limits of accommodation to distance or other movements of the eye. Ocular pains of this kind are felt as an aching about the middle and back of the head. The scrutiny of paintings or engravings, from the many points of interest which have to be noted, requires a considerably greater exercise of the muscles of the eyeball than is called for in ordinary life. In this fact, established, as we have already stated, on a basis of fatigue and general muscular and nervous strain, we have probably the usual exciting cause of the form of headache we have been discussing.

DISEASE AS AFFECTED BY THE CLEARING AND CULTIVATION OF LAND.

Among the papers presented to the Ohio State Sanitary Association at its meeting last February, was one which we have read with much satisfaction, as it has appeared in full in the published Proceedings of the meeting. The subject is "Climatic Changes in Ohio, from the Destruction of the Forests and the Drainage of the Land, and their Effects on the Health of the People." The author, Dr. R. Harvey Reed, of Mansfield, has taken pains to collect from old physicians in the State, and from local sources, a mass of information not heretofore accessible, and his results are of importance not merely for the medical history of his own State, but for that of our whole country, which has but recently emerged from the forest wherever we go.

He traces the progressive removal of the primitive forests, the upheaval and drainage of the soil, and correlated to them, the modifications in the types of prevalent diseases. His general conclusions are so interesting that we give them:

1. From the destruction of the forests we have more wind, more humidity, and more rainfall (as shown by the Signal Service records), more dust, more sudden dashes of rain, resulting in more sudden changes from one extreme to the other, both as relates to temperature and moisture.

2. From the immense amount of artificial drainage, and the improvement of natural watercourses, there is a much more rapid transmission of water from the periphery to the great trunks and basins.

3. These two causes combined, act—1st, in removing the surplus surface-water supply more rapidly; 2d, by the decidedly increased evaporation: they together rob the natural regulators, and lessen the common supply of springs and wells, while the latter require deeper average penetration (as is shown in the records of well-driving firms), and the former, which once were strong, have partially or totally failed.

4. These changes have been followed with a decrease of all forms of malarial diseases, and an increase of typhoid fever, together with a very decided increase of all forms of catarrh, and their common sequelæ—deafness and chronic pulmonary troubles.

Finally the author is of the opinion, in addition to all these, that the increase of wind and dust is a decided factor in the propagation and spread of all forms of contagious and zymotic diseases, and furnishes a rational explanation for the frequent occurrence of the so-called sporadic cases of contagious diseases.

From some similar observations which we collected about twenty years ago in the State of Illinois, which, as our readers are aware, is largely a prairie state, and where the changes could not have come from the denudation of the soil, there had been a similar alteration of type in disease since the first generation after the general settlement of the country. The forms of malignant "bilious fever" with which the old physicians had to combat are now scarcely met with; malaria, though frequent, is unquestionably less severe; typhoid fever has increased; and spinal meningitis is decidedly more abundant. The cli-

mate has been modified much, as in Ohio, the cause apparently being the more rapid surface drainage.

It is highly desirable that these investigations be carried out while there are still living in most of our states physicians whose experiences carry them back to the epoch of the settlement of their localities, or nearly so.

Notes and Comments.

Plantar Neuralgia.

We cannot read too much about neuralgia, for there is probably no disease, that is not fatal in its character, that is so obstinate and so resisting in treatment; hence we reproduce the following case which Dr. C. W. Suckling reports in the *London Med. Times*, June 13:

H. E., a single woman, aged 38, employed as a domestic servant, was admitted into the hospital, April 9, 1885, complaining of pain in the soles of the feet, and inability to walk or stand on account of the pain. Both her parents had suffered from rheumatism, and two of her brothers have had rheumatic fever.

The patient had had jaundice twice, otherwise she had enjoyed good health, but was not robust. About four years ago, she had pains in both her feet, similar to the present illness, but soon recovered. Three weeks before admission she got her feet damp, and the next day they were very painful. There were shooting pains confined to the soles of the feet near the heel. The pain was much aggravated by walking or standing, and much relieved by lying down.

When examined on admission, there was considerable hyperæsthesia of the soles of both feet and tenderness. The hyperæsthetic area was close to the heel, and measured an inch and a half in length, and one inch in width on each foot. When the feet are allowed to hang down the painful areas become red and the veins stand out, and free perspiration follows. The same phenomena occurred after walking a few yards. There was a tender spot behind the internal malleolus and another over the heel. There was no special tenderness, no pain in the back, or any sign of disease of the spinal cord or its membranes. There was no pain in the joints, nor any heart murmur. The urine was normal.

The patient was kept in bed, and a blister applied behind the internal malleolus of each foot. Simple rest in bed relieved the pains, but she always suffered from them at night. Repeated blistering finally caused complete cessation of the pains.

At the time of reporting (May 9) hanging the feet out of bed does not cause them to become red or to perspire, and walking does not cause pain. For the time, at any rate, the patient is well.

This disease was first described by Weir Mitchell, and is said to be rare in women.

On the 20th of May the patient left the infirmary perfectly well.

On the 25th the patient, after having tramped about and been much exposed, was re-admitted, the pains having returned, but in a less degree than when first admitted.

A Case of Idiopathic Tetanus.

These cases are sufficiently rare to warrant reproduction; hence, we note the case which Dr. O. N. Royle reports in the *Lancet*, June 13:

He was sent for at two o'clock on the morning of March 11th last to see the patient (a woman). The messenger, upon inquiry, informed him that she had been feeling ill for the last ten days, with spasms and slight pains in the stomach, and that her bowels had been unrelieved for more than a week. Looking at the constipation as cause and effect—the night, moreover, a stormy one, and the house some distance from his residence—he did not consider the nature of the attack one of sufficient urgency to pay a visit at that early hour, so sent her by the bearer a brisk purge of croton oil, with directions to foment the body well until he saw her. Calling at eight o'clock the same morning, the bowels, he found, had freely acted, but the pain and spasm associated therewith had much increased. He then for the first time recognized the nature of her case. The last day in February, it seems, this poor woman had become greatly alarmed at seeing the hand of a child placed on a machine for cutting turnips in motion, although with no injury to the child further than a slight graze of one finger. It was a clear case of idiopathic tetanus from nervous shock. The poor husband was in great grief and distress about his wife, whom he succeeded in calming by the assurance that she would soon be better; nevertheless, every day for more than a week after first seeing her the symptoms increased in severity. Trismus and opisthotonos at one time were well marked, the latter coming on after an interval of some hours, and lasting from five to ten minutes, resisting apparently all treatment employed, first with opium in two-grain doses every three hours

for three consecutive days, then with chloral in half-drachm doses every four hours for a like period, with very little improvement, and subsequently with one grain of morphia injected hypodermically every night with two of Indian hemp, repeated at short intervals during the day—the symptoms after this treatment gradually disappearing on the second day until her recovery, just three weeks after receiving the shock. The case he thinks of some interest and worthy of record; first, from the great impression made on the nervous system from so slight a cause; again, no marked symptom of the disease showing itself until the eleventh day after the fright, resisting at first all treatment; and lastly, succumbing to Indian hemp and morphia injections, a line of treatment he should commence with most certainly if ever called upon to treat a similar case.

Periostitis Following Typhoid Fever.

The specific relation (if there is any) between typhoid fever and periostitis, is an interesting field for observation. We have already noticed several cases that have been reported, and now in the hope of causing further notice of this phenomenon we record the following case which Dr. Thomas Preston Gostling publishes in the *Brit. Med. Jour.*, June 6:

"The patient, a young woman, aged 17, had a moderately severe attack of fever, with a relapse occurring on the twenty-first day of illness, and before the first attack had subsided. The spots were very numerous, and involved the extremities, being present below both elbows and on the inner part of the thighs. There was constipation throughout; and in the relapse she complained of deafness and pain in the left ear, without any discharge. The pain lasted two days, the deafness four days.

"On April 2 (fortieth day of disease), and after the temperature had been normal for six days, the patient complained of pain over the centre of the right tibia, on its inner surface, and the temperature rose to 99.2°. There were very slight redness, some swelling, and also well-marked tenderness. Extract of belladonna, mixed with an equal quantity of glycerine, was smeared on the part, and hot fomentations were applied, which relieved the pain slightly for a time, although, on April 3, the swelling had increased in size. Redness now extended over an area of about four square inches. Fluctuation could not be obtained, and the attempt to do so caused intense pain.

"On April 6, the temperature had reached 99.6°; the pain had increased; the tenderness had become excessive; and the swelling had become larger, now measuring 4 inches long by 3½ inches wide. The pain was much worse at night, and kept the patient awake.

"An enlarged painful gland was noticed in the right popliteal space on April 9, and on the following day there was distinct fluctuation over the centre of the swelling. It was opened by a small longitudinal incision, and half a drachm of pus escaped. The temperature came down to normal the next day, and remained so until the discharge of the patient. The pain was at once relieved by the operation.

"A careful examination did not show any bare bone. Fomentations were continued until April 14, when, the wound having commenced to granulate, it was dressed with red wash, and it had entirely healed by April 21. The swelling had also entirely vanished."

A Series of Cases of Diphtheria.

The following series reported in the *Brit. Med. Jour.*, by Dr. T. H. Sawtell will furnish food for thought:

Between April 20 and 30, diphtheria attacked all the children living in a house in Hornsey Rise, members of two families. The ages were three and three-fourths years, four and one-half years, three and one-fourth years, two and three-fourths years, eighteen months, and eight months respectively, six in all.

The first patient was moribund when his parents called me in. Chloroform and emetics failing, I did tracheotomy. For twenty hours he breathed well, but died four hours later. The necropsy revealed collapse of both lungs, with non-adherent membrane throughout the trachea and bronchi, the subjacent mucous membrane smooth, slimy, neither tumid nor congested. On the tonsils, the usual diphtheritic appearances were present. He had been ill for nearly four days.

In the second case, the air-passages proper seemed to escape, but the membrane rapidly invested the eyelids, nostrils, mouth, and fauces. All these surfaces bled freely. Hard œdema, with enormous swelling, occupied the whole neck, finally reaching the chest-wall. There was no marked dyspnœa. On the seventh day, stasis, and hemorrhages occurred in the limbs, and the child died quite suddenly from clotting of blood in the heart or great vessels. There was no post-mortem examination.

The treatment, adopted also in the other four cases, modified as circumstances required, was, brandy very freely, tincture of perchloride of iron

in five-minim doses every four hours, frequent emetics, with a diet of milk and egg. While the throat was actively inflamed, I used antimony to produce vomiting, following it with abundant brandy.

The child aged three and one-fourth years, although exhibiting very acute symptoms, rapidly recovered after three days.

Cases four, five, and six were very severe, all having malignant symptoms, with epistaxis, etc. After much trouble, however, they escaped. In my judgment, tracheotomy was contra-indicated in all the cases except the first. The interest of these notes lies in the fact that four out of five malignant cases, two of them infants, were treated successfully with abundant brandy, frequent emetics (at first antimonial), and iron, the membrane on the tonsils and pharynx being undisturbed; in fact, the throat was not touched.

Intra-Pulmonary Injections.

The treatment of phthisis has at all times been unsatisfactory; cases often progressing steadily downwards in spite of our most active therapeutics. Dr. W. C. Phillips, in the *New York Med. Jour.*, June 20, 1885, records two cases of intra-pulmonary injections, one in advanced phthisis and the other with a large superficial excavation.

Solutions of permanganate of potash, iodine, and carbolic acid have been used by other experimenters with invariably good results. The doctor used Lugol's solution diluted with five times its quantity of water, using an ordinary hypodermic syringe.

The injection causes but little pain, and is to be performed at full held inspiration, as it is then easier to keep the lung in repose. He suggests that the needle be graduated in inches and fractions thereof, thus enabling one to be more accurate.

Both of his cases were followed by good results; in one the improvement was marked.

The case of Pepper's, referred to in the article, has been seen a number of times by the writer in the Philadelphia Hospital. Her disease has undoubtedly been held in check by the injections used by Pepper ten years ago.

The doctor offers as suggestions, first, could not the injection be given with impunity much oftener than has been recommended by Pepper and Robinson? Second, is not the severe paroxysm of coughing caused by the injection being thrown directly into a bronchus?

In regard to the first, he says his patient received five injections in eight days, and the result has been not in the least disastrous. In regard to proposition second, each time that the patient had a paroxysm of coughing she at the same time mentioned that she observed the acrid iodine taste in her mouth; at times when she did not cough she complained of no taste in the mouth; hence, the conclusion is obvious that the cough is caused by the irritating effect of the fluid upon the membrane of some part of the bronchial tract.

Hysteria, with Attacks of Tetany, Induced by Pressure on the Ovary.

E. L., a woman aged 27, was admitted into the Queen's Hospital, February 23d, 1885, suffering from paraplegia. She was markedly hysterical and had the characteristic "facies hysterica." While in the hospital she suffered from globus, clavus, dyspnœa and flushings of the face. At times also she had photophobia.

There was marked ovarian hyperæsthesia, and firm pressure over either ovary at once produced flushing of the face, a painful sense of fulness in the throat, and choking, quickly followed by rigidity of hands and feet, the hands assuming the characteristic posture observed in tetany. The legs and feet were strongly extended, the big toes showing a tendency to be flexed. Trismus was also brought about at the same time. The rigidity quickly passed off after discontinuance of the pressure. On one occasion catalepsy was present, the limbs maintaining any position in which they were placed for a considerable time.

The treatment consisted in isolation, blistering over the situation of the ovaries, and Faradization. The patient when discharged could walk well, and had lost the ovarian tenderness; no symptoms were produced by pressure.

The above case, which Dr. C. W. Suckling reports in the *London Med. Times*, June 13, is very instructive and possesses much practical interest, in so far as it will serve to remind us that in very many of those mysterious and illy-defined hysterical conditions so often noted in women, the ovaries are at fault; it reminds us that we should look to and direct our treatment to these little organs. Pressure over the ovaries will often serve to unravel hitherto mysterious cases.

Osphresiology.

The *Med. News*, June 20th, tells us that Dr. Monin, Secretary of the French Society of Hygiene, has recently written a monograph upon the odors of the human body. The Society of Medicine of Paris has given him its triennial prize for this

work. The subjects successively treated in it are the odor of the skin and its appendages, the odor of the breath, of expectorations, of vomited matters, and of eructations, of feces and intestinal gases, of the urine, of the female genital organs, and of suppuration and gangrene.

Various pathological conditions are indicated by the odor of the skin, or of its perspiration, and by that of the breath. For example, the skin has an ammoniacal odor in cholera, and in dysentery the perspiration has the odor of the anal dejections; in hysteria the hair has the odor of ozone. In diabetes the breath has a sourish odor; if this odor be slight, it is due to aldehyde, but, when more marked, it is due to acetonæmia; a garlic odor of the breath in infants indicates intestinal worms, and upon this indication alone anthelmintics may be given.

Of course, the detection of faint odors will depend upon the olfactory power of the individual, and one may be able to perceive distinctly that which another fails to recognize, for doubtless there are just as great variations in the sense concerned as have been shown to exist in the sense of hearing, or in that of seeing. It is probable that science, which has done such marvels in making the unseen seen, so vastly increasing the size of an object of research, will one day find means to make odors more distinct, and thus assist professional investigation.

Heroic, or Poisonous Doses.

At a recent meeting of the Société de Thérapeutique M. Huchard brought forward to the notice of his colleagues several examples of accidents succeeding the administration of iodide of potassium in large doses. Besides the iodism usually observed, such as swelling of the eyelids, œdema of the face, and even purpura iodic, other symptoms of a graver character have been observed by him in two cases. The first, that of a man who took forty grains of the iodide and a drachm of the bromide for an aneurism, very violent dyspnœa followed. The second, a syphilitic, was attacked with such severe suffocation after having been given a certain quantity of the iodide, that tracheotomy had to be performed to save his life. M. Lereboullet said that when he was house-surgeon at a hospital in Strasburg he saw given for syphilis as much as *nine drachms of iodide of potassium a day*. Rarely evil results followed this large dose, and he thought that idiosyncrasy in many persons would account for the accidents referred to. In affections of the aorta and atheroma he has given it in small doses (five or six grains) with the best result, but it should be continued for a long while. M. Huchard said that he gave the salt at the rate of one gramme a day, or fifteen grains for two years, in angina pectoris, and he is confident that he has obtained several definite cures.

A Curious Case of Hiccough Cured by the Extraction of Nine Needles from the Epigastrium.

Liégeois has described in the *Revue Méd. de l'Est* a case of intractable hiccough in a nervous and irritable woman, aged twenty-one. The paroxysm lasted twenty-four days, and was so violent that the whole body was shaken, and the noise could be heard at a distance of forty yards. Bromide of potassium and ether had been given without success. Chloral and hyoscyamine produced a temporary improvement, but the paroxysms reappeared after a time. Opium and atropia were then administered, and the hiccough ceased for about a month, when a new attack occurred. Five months later, a small abscess formed in the epigastric region, and a needle, which projected through the skin, was extracted by the patient's sister. An incision was then made by Dr. Liégeois, who found eight other needles in the subcutaneous tissue. This operation was followed by a complete cure, but the author is unable to state whether the needles had been swallowed or introduced under the skin by the patient herself.

Systematic Examination of Wet-nurses for Preventing the Transmission of Syphilis.

The *Med. Record*, May 30, says: Several years ago a bureau was started in Moscow (*Jahrbuch für Kinderheilkunde*), where wet-nurses could be examined by specialists with reference to old or recent syphilis. The examination was intended to be a very searching one, on account of the latency which characterizes this disease, and the possibility of future outbreaks in such cases. A certificate of immunity was withheld if suspicious glandular swellings, scars in certain places and of a certain character, suspicious pigmentations, or swellings of the bones were present, or if there was a history of repeated miscarriages. The condition of the nipples was especially noted. Of 490 women, who were examined in the course of three years, seventeen per cent. were refused certificates of immunity. In an additional four per cent. of cases, the evidences of syphilis were unmistakable. It is gratifying to know that this bureau appears to have met with the approval of Russian physicians. But in our own country the establishment of such an institution is hardly practicable.

Simulo in Epilepsy.

In the first number of *El Boletin Medico*, published at Trujillo, Peru, Dr. Larrea y Quezada recommends the treatment of epilepsy by an Indian remedy "simulo," which is the fruit of *Capparis Coriacea*, a plant indigenous in Peru. *Melocharn*, a conserve made from another plant belonging to the same natural order, is also used in epilepsy. Of the powdered simulo, 45 grammes are mixed with 500 grammes of the sweet sacramental wine, and of this a wineglassful is to be taken night and morning. In his own case, this treatment was most successful. As a boy, aged 13, he had fourteen epileptic attacks, preceded by a distinct aura, but under this treatment the fits left him. Since he has been in practice he has employed simulo extensively in epilepsy, hysteria, and other nervous diseases.

A Formula for Ring-worm.

Dr. Henry Browne gives it to us in the *Brit. Med. Jour.*, June 6:

℞.	Sodæ hyposulphitis,	ʒj.
	Solve in aqua,	fl. ℥viij.
	Et adde acidi hydrochlorici,	fl. ʒj.

For outward use only.

The use of this lotion, as a water-dressing covered with oiled silk, and accompanied by daily washing in soft soap and water, has proved perfectly satisfactory.

An Ointment for Sore Nipples.

Groussin (Eclraireur Pharm.; Lyon Méd., N. Y. M. J., June 20, 1885) recommends, for application to sore nipples in nursing women, the following ointment:

℞.	Sacch. alb.,		ʒj.
	Zinci. ox.,		ʒj.
	Acaciæ,		
	Glycerinæ,	āā	ʒj.

Mft. ungt.

Correspondence.

The Communicability of Scarlet Fever.

Eds. Med. and Surg. Reporter:—

I noticed an article in the last number of the Reporter, on "The Communicability of Scarlet Fever through a Third Healthy Person," and, thinking my experience may add something to the literature of the subject, I write this hurried note. In the fall of 1878 Mrs. G., of this place, visited friends some fifteen miles or more from here, staying two or three weeks.

Previous to that time there had been no case of scarlet fever in this neighborhood, and no epidemics of the disease for several years. There were some few cases in the community where Mrs. G. was visiting, but, as subsequently learned, not seemingly of a malignant character. In about a week or ten days after her return, two of her little grandchildren were taken with the disease in so mild a form that, if it had not been for the throat-trouble and the peculiar pasty condition of the tongue, it would hardly have been recognized as scarlet fever. The cases progressed favorably and the patients were soon well.

In the meantime, a family living about one or two hundred yards away from Mrs. G., and whom she visited soon after her return, were taken with the disease, in all its virulence, one of the children dying in a few days, and some five or six others had the disease with its unpleasant sequelæ, and tardy convalescence. These children were *never* outside of their own door or yard, and the only possible communication was as above mentioned. In addition to this, my own little boy, as in the case of Dr. Hewetsen's, climbed on my lap after my return from seeing Mrs. G.'s grandchildren, and in the usual time the disease developed, and the child died in a few days. My other children also had it, but recovered, and the disease became general, spreading far and wide throughout the community.

In the fall of 1879, when there had been no known cases of scarlet fever for six months at least, a woman came on a visit to a family in another part of my field of practice, from a place some thirty or forty miles away, where scarlet fever was prevalent. The usual result followed in the family she was visiting. Every child in the family—seven—being attacked by malignant scarlet fever. All recovered, however. The disease spread, and was of the most malignant type I ever saw. One bright little fellow died in less than ten hours after he was taken, or at least after he complained of being sick, another in eighteen hours and so on. I hope to be spared from ever passing through epidemics of scarlet fever such as I have mentioned.

It seemed to spare neither age, sex nor "previous condition of servitude." I saw cases that were well-marked in persons as old as sixty years and more, and all ages younger than that.

I never knew a nursing child to die of scarlet fever, and regard the danger, other things being equal, as slight, even when malignant, after the age of puberty. Parturients, however, should be excepted. Since that time I have never had a doubt in regard to the communicability of scarlet fever.

In this connection, it may not be out of place for me to give a short similar testimony in regard to diphtheria. Mr. M. and his wife, parents of a large family, all of them at home, except the two oldest daughters, married, went on a visit to one daughter, married, living not far from Wheeling, West Virginia, taking their youngest child, a boy some four or five years old with them. Whilst there he contracted diphtheria, which was prevailing there, and died after a short illness. The heart-broken parents buried their baby among strangers and returned home.

There had not been a case of diphtheria in this country for a long time, although scarlet fever was epidemic, but in a week or two diphtheria, in its most malignant form, broke out in Mr. M.'s

family, and four out of six remaining at home died. Mr. and Mrs. M. said they brought nothing with them that had been about the first child that died, so that the disease must have been carried in their own clothing.

WM. F. MITCHELL, M. D.

Addison, Pa., June 29, 1885.

Facial Erysipelas.

EDS. MED. AND SURG. REPORTER:—

This disease has long been known by various appellations throughout the civilized world, and yet comparatively little is known of its ætiology, and there is room for improvement in the treatment. It was formerly treated entirely as a local disease; but the old barbarous treatment with caustic applications has deservedly fallen into disrepute. Many are the cases who suffer from the intense burning and disfiguration of the face resulting from facial erysipelas; and in some cases life is destroyed. And yet, many of the sages of our profession seem to regard it of little importance, and lecturers in our colleges give it a mere passing notice. In the REPORTER, February 21, 1885, there appeared an article on pilocarpine in this disease. In another, February 7, a member of the profession reports a case of facial erysipelas cured with local applications of ext. jaborandi, fld. ℥j.; tinct. opii and glycerine, āā., ℥ss: preceded by a purgative, which of, course should always be given when needed. Of course, we cannot doubt the truth of his statement; but that there are cases of this disease not amenable to local applications of any drugs yet employed, is self-evident. It is not my purpose to set forth anything new, or to exhume anything ancient in the treatment of this disease, but if possible to discover some mode of treatment that will arrest the course of the disease more rapidly, and without the deleterious influence on the teeth of tincture of iron, which is now our "sheet anchor." I should be glad to have the experience of any member of the profession who has used jaborandi or its alkaloid in this disease—the dose given, interval between doses, and how long continued. In case of nausea and vomiting, which usually follow large doses of jaborandi, what are we to do? I think we ought to report the failures as well as the successes. I have heard of cranberry poultice being used in this disease. Has any one tried it? If so, is the result due to the heat and moisture, or to some therapeutic property contained in the berry?

I will ask your indulgence for a brief period, while I give my experience with jaborandi in a case of facial erysipelas. Was called to see Mrs. D. about 3 p. m.; age 35, medium height and weight, with neither history of any hereditary disease, nor previous attack of erysipelas. She complained of intense pain in the head, face swollen, discolored, and exceedingly sensitive to the touch. The swelling and discoloration extended from a point just below the left eye, over the entire side of the face and nose. Temperature 105°, pulse 120 per minute. I ordered internally, ext. jaborandi fld. gtt. xx. every hour, and locally, ext. jaborandi, fld. ℥j., tinct. opii, and glycerine āā ℥ss., keeping the face moist with this preparation. I returned about 9 p. m., finding the patient still suffering as before, with the addition of nausea and vomiting. I succeeded in checking the vomiting by discontinuing the jaborandi a short time and using bismuth subnit. I continued this treatment for three days, giving the patient all the jaborandi her stomach would tolerate and applying it locally as at first. The disease continued to spread, now covering the entire face, ears and sides of the neck. The temperature continued as high as ever, and in fact the case began to assume a serious aspect. I ordered tinct. ferri chloridi gtt. xx. every hour. In twelve hours the fever abated a little, and the patient was more comfortable. The interval between the doses was lengthened to two hours. In three days the temperature was normal, and the swelling and discoloration nearly gone.

The iron was continued a few days in smaller doses at longer intervals, and was followed by elix. quiniæ. ferri et strychniæ, as a tonic. The patient made a complete recovery without any discoloration of the face. It is unfortunate both for us and our patients that all cases do not terminate thus happily. While I was treating the case reported, I was also treating a case which finally succumbed after an illness of about eight weeks. This patient was treated with tinct. of iron in large doses from the first. Some cases cannot take tinct. of iron, and pills of "reduced iron" may be used.

J. H. MOORE, M. D.

Spring Hill, Johnson county, Kansas.

NEWS AND MISCELLANY.

Death of Armand Peltzer. (The Finale of a Great Crime.)

A recent number of *La Belgique* records the death of Armand Peltzer, who, along with his brother Leon, was found guilty of the murder of William Bernays, the eminent Belgian advocate. The details of this crime, which was designed by Armand, now deceased, and carried out by Leon, were of the most sensational character, transcending the most exciting narratives of Braddon or of Allan Poe, and were fully described in its pages for February, 1883, p. 106. The two brothers were sentenced to death, but, owing to the insuperable objection of the King of the Belgians to capital punishment, had the capital sentences altered to imprisonment for life. They were employed as bookbinders, and Leon, being of a coarser organization, appears to have reconciled himself to the situation. Armand, ambitious, unscrupulous, crafty, and fond of pleasure, felt keenly the loss of social position and enjoyment; he got thinner and weaker, and gradually fretted his life away. Last week he was attacked with pulmonary hemorrhage, to which he quickly succumbed. Neither of the Peltzers had to complain of material discomfort, and, in fact, their treatment all along and at the close illustrates the present unhealthy moral atmosphere of social life in some parts of the Continent. Here they would have been convicted felons of the more heinous type, known by their prison numbers, dressed in prison clothes, and seeing their families at distant intervals, and separated by solitary confinement.

In the Belgian prison the Peltzers used to see their families whenever they liked, in a comfortably furnished room and in their ordinary clothing, which they used to put on for the purpose (*revetir les habites burgeois pour reçevoir la visite*). Leon had a taste for reading, and in his room were "The Letters of Paul Louis Courrier," "The History of Napoleon the First" by Lanfrey, and a number of works of fiction, travels, and history, lent to him by various private friends. He requested to be supplied with the *Revue de deux Mondes*, but the Director of the prison declined to permit this. In these countries the death of notorious criminals either passes unnoticed, or, at most, is briefly mentioned in the journals. The closing events of Armand Peltzer's life are described at length, and read very like the deathbed scene in "Traviata." All that was said and done by himself and by the others present, is recorded with much unction, constituting a regular apotheosis of crime. The newspaper account concludes by mentioning that the remains of Armand Peltzer are to be removed from the prison of Louvain (where he died) to Berchem, the fashionable cemetery of Brussels, where they are to be interred in the family vault.

The Waking Power.

The *Popular Science News* tells us that an old problem of the psychologists has been revived by a letter to *La Nature*, written by a French business man, who mentions that for years he has been in the habit of waking himself at any hour in the morning that he wished, simply by impressing upon his mind, before going to sleep, the fact that he must awake at that hour. He says, further, that he seldom varies five minutes from the moment which he has assigned himself. The editor of the journal adds: "We have a distinct recollection of many instances in which we have ourselves tried the experiment with success; and at one time, when it was necessary for a considerable period for us to wake on certain days of the week at a very early hour, to take the first train to the place where our services were then needed, we had an opportunity of studying the circumstances under which this peculiar species of self-control is most easily exercised.

"Whatever part of our mind it might have been that took charge of waking us, seemed to begin its count of the hours from the time at which we composed ourselves to sleep; and, if we did not inform ourselves of this, our conscious reckoning was correspondingly uncertain, and the effort to wake vague; but, if we took a clear note of the time in the evening, we could sleep peacefully through the whole of the allotted interval, sure of being aroused at or near its expiration.

"Another condition of waking we found to be the occurrence of some small external event, through which, as it were, the internal effort could take effect upon our senses. A very trifling circumstance—the flutter of a leaf outside the window, the chirp of a bird, or any other of the unnumbered sounds of early morning—was sufficient, if it happened at the right time, to wake us by a sort of magnifying process, which at that moment gave the power of starting up by a noise which would at other times be unnoticed; but without such sensible impression, we think we should not have waked. In fact, on one or two occasions we remember to have been impressed with a dim consciousness of waiting for something to happen before waking; and a moment later a trifling sound would open our senses with a little shock. To the necessity of waiting for this impression, small as it might be, we were disposed to attribute the variation of a minute or two, either way, from the exact moment assigned for waking, which might otherwise be kept with exact punctuality."

Aunt Betsy's "Simpsons."

A writer in the *Columbus Med. Jour.*, for July, says:

One day, not long ago, I was called to see an old colored woman of the "fo'-de-war" type, black as the ten of spades (which is ten times blacker than the ace), extremely voluble, and anxious to impress me with the importance of her "simpsons," of which she was determined I should have a full and clear understanding before I prescribed.

"My mis'ry, doctor, wuks right up from bofe my legs, an' up through my stummick, and den crosst my bowels, all a shaky an' a wig-waggy! Den my right shoulder, doctor. *Law sakes!!!* Dat yer mis'ry in my right shoulder pow'ful bad sometimes. Den I has shootin' pains all up an' down my spine; dreadful! an' lumps in my flanks, an' a burnin' all over my right side, an' a *roarin'!* yes, honey, an' awful roarin' in my head, an' de bones all loose in my head. Den I has pains in bofe shoulders, an' my insides dey workin' jes' like maggots!! an' I has a draggin' in my stummick, an' my sistum very bad. Ef you b'lieve me, doctor, dar's a patch of mis'ry in de small o' my back, an' when I stan' up 'pears like my insides dey stickin' to my spine! an' a wallowin' in my head, an' I don' got no appetite, an' 'pears like every minute I gwine throw up my insides. I can't drink no fresh water; drinks all my water *biled!* In de night you can hear my head a roarin' an' a buzzin', an' den my bowels gets to workin', an' you can hear 'em a crackin' an' a blabbin', an' dey all a shakin' an' a trimblin'. Den I has a hotness in de bone o' my neck; yes, doctor, right in de bone o' my neck, an' at fuss a *pang* riz up right acrost my neck, an' riz an' *bust!!* I knowed it wa'n't a blood-vessel else I died *sure.*"

The Pennsylvania State Board of Health.

At the first meeting of the State Board of Health, held at Harrisburg July 2 and 3, immediately after the organization of the Board was completed, the following resolutions were unanimously adopted:

Resolved, That the State Board of Health desires to express its hearty approbation of the energetic measures now being prosecuted by the health authorities of the cities of Philadelphia, Pittsburgh, and Erie, in order to avert the threatened invasion of Asiatic cholera during the present summer.

Resolved, That in house-to-house inspection, faithfully and fearlessly performed, it recognizes the only reliable means for discovering the actual

sanitary condition of a city, and that the appointment in the city of Philadelphia of an officer who shall devote his entire time to the work of disinfecting such premises as are reported by the inspectors to be a source of danger to the public health, affords reasonable ground for the hope that with proper pecuniary support from the City Councils, these efforts will there be crowned with success.

Resolved, That the Board of Health regrets the suspension of the order of the Board of Health of Philadelphia, directing the disuse of filling up of wells of drinking water in built-up parts of the city, believing that all such wells, if not already polluted, must shortly become so, thus constituting a constant source and menace of disease.

Resolved, That that this Board pledges to the Boards of Health, Health Commissioners and Health Officers of the cities aforesaid, its vigorous co-operation in all action designed to avert pestilence from and maintain a high standard of public health in, the ports of entry of this commonwealth, and will unhesitatingly use for this purpose the powers which the Legislature has conferred upon it, and will also avail itself of such advantages as may accrue from its relations to the National Board of Health and the Boards of Health of neighboring states, to the same end.

Resolved, That in view of the lateness of the season, and the threatening character of the intelligence from the south of Europe in regard to the progress of Asiatic cholera, the Boards of Health or health officers of the aforesaid cities be requested to send at once to the secretary of this Board copies of their regular reports, together with such other information as in their judgment it may be important that this Board should be in possession of, without waiting for the preparation of blanks by this Board.

Medicine in Greece.

The *London Med. Times*, May 16, 1885, tells us that a correspondent of the *Semaine Médicale* (May 6) gives a satisfactory account of the state of medical education in Greece at the present time. The Faculty of Medicine of Athens, he observes, is the most important of the two Medical Schools in the East. (The other, that of Constantinople, is especially devoted to the instruction of military doctors for the Turkish army.) It is well managed, and is provided with clinics for the complete instruction of the numerous students who frequent it, not only from the different parts of Greece itself, but also from the entire East. The old laboratories have been replaced by new constructions; and the Hellenic government has determined upon founding a new laboratory for the physical sciences, and a large establishment for anatomical and microscopical researches. The study of medicine extends over four years, and for the degree of doctor an examination has to be passed at the end of the second year, and another at the end of the fourth year. But the diploma does not confer the right to practice, for which another year has to be passed at the hospitals, and a third examination undergone. Athens possesses two important medical societies, the Society of Medicine and that of Hygiene, while the Parnassus, which is a scientific and literary society, has a section devoted to medicine, physiology, anthropology, and physics. There are two medical weekly journals, and a monthly one, published by the Society of Hygiene. A Greek Medical Congress has also been established. Its first meeting was held at Athens in 1882, and the next is to take place at Constantinople in 1886.

The Yellowstone Park as a Winter Sanitarium

From my own observations, and from inquiries made on the spot, I am of opinion that the Yellowstone National Park possesses, in a high degree, all these essential conditions. In elevation above the sea it surpasses Davos; the great plateau of the park is between 7,000 and 8,000 feet above sea-level, while it is stated that not one of the narrow valleys dips below 6,000 feet. The mountain ranges, partly surrounding and partly within the park, rise to heights of from 10,000 to 12,000 feet. I should anticipate, therefore, that all the advantages which, as a winter resort for invalids, Davos possesses from its elevated position, would be enjoyed even in a greater degree in the Yellowstone Park. The period of permanent snow is longer, so that invalids could remain there probably until the end of April, whereas the melting of the snow generally compels them to leave Davos early in March, when the climate of the valleys is peculiarly unfavorable for chest complaints. It is to be expected, from its greater elevation, that a still clearer sky and a larger proportion of sunny days would be experienced in the Yellowstone Park, while the wholesomeness of the air would be still more marked, owing to its comparatively greater freedom from zymotic matter.—*From "A Great Winter Sanitarium for the American Continent," by Prof. Edward Frankland, in Popular Science Monthly for July.*

Medical Mission Work in China.

From the report for 1884 of the Hang Chow Medical Mission in connection with the Church Missionary Society, it appears that the total number of out-patients attended during the year was 2,920 and of in-patients 235, patients visited at their homes bringing up the total of those who were relieved by the mission to 4,707. Anæmia, as in the case of the Chin-Chew Hospital, the work of which was noticed in a recent issue, formed a large percentage of the cases coming under treatment. It is especially common amongst women, and is easily accounted for by the following causes: Marrying too young, hemorrhagic losses during confinement, suckling their children for three or four years, and their cramped feet, which prevent them taking proper and sufficient exercise. Diseases of the skin and digestive system and malarious fever also each contribute a large percentage of patients. A new hospital, comprising a refuge for opium smokers, which was its *raison d'être* when commenced some thirteen months ago, and a medical school are almost completed, and will, it is expected, be opened in a few months.

Therapeutical Inventions.

THE MCINTOSH BATTERIES.

The McIntosh Galvanic and Faradic Company,

of Chicago, attracted much attention at the New Orleans Exhibition for their fine display of goods and the improvement they have made in electrical articles generally. They received first medal for fine displays of electrical goods, and first medal for their combined solar microscope and stereopticon. Dr. L. D. McIntosh, the inventor, deserves great credit for arranging and making this display, because he met in competition the electrical inventions of Europe and America and took the first medal.

STAUFFER'S UTERINE EXAMINING INSTRUMENTS.

These instruments are of hard rubber, the specula with a high internal polish, not breakable, admirably arranged for carrying in the pocket without occupying much room, and very durable. We have used them for years, and prefer them to any others we have tried. A descriptive and price list may be obtained of the manufacturer by addressing care of this journal.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, for the week ended June 13, 1885.

Long, W. H., surgeon. Granted leave of absence for three days, June 18, 1885.

Fessenden, C. S. D., surgeon. Leave of absence extended seven days on account of sickness, June 24, 1885.

White, J. H., assistant surgeon. Granted leave of absence for twenty-one days, June 23, 1885.

Items.

—Pasteur's method of vaccination for cattle-plague has proved completely successful in India for elephants, horses, asses, cows, buffaloes, and sheep.

—Oxide of zinc, according to Professor Peterson, of Kiel, is just as *good as iodoform in the treatment of wounds*, is not poisonous, is cheaper, and does not smell offensively.

—The *Pacific Medical and Surgical Journal* states that the law regulating medical practice is a failure, because juries cannot be found who will convict, "even though they be the lowest Chinese charlatans."

—Nasal polypi, it is said, can be readily cured by the injection of a solution of a scruple of tannic acid in a fluid drachm of water. Ten to twenty minims of the solution are to be injected into the polypus. The polypus shrivels, dries up, and comes away without pain or trouble.

—An unusual bathing fatality is reported from Greenock (Scotland), where a boy, while bathing in a stream, fell on his side against a broken bottle. The abdominal walls were cut through, and the intestines protruded. He was conveyed to the infirmary, but succumbed to his injuries within forty-eight hours.

—Dr. Pasquale Ferraro has recently (*Il Morgagni*, February and April, 1885) conducted a research on the comparative pathology of diabetes, in the Anatomical Institute of the University of Naples, under the direction of Prof. Schrön. It results that diabetes mellitus may develop spontaneously in the dog, and gradually intensify until it becomes fatal. The etiology, clinical course, and histological anatomy of the disease, are similar in the human and canine species.

—Chicago is to have a charity that will be a credit to the philanthropy of its founder. March 7, the will of Mrs. Clarissa C. Peck was admitted to probate. By the provisions of this will, the sum of $125,000 is appropriated to the purchase of ground and the erection and furnishing of a building to be known as a home for incurables, and the balance of an estate amounting to upward of $600,000 is given as an endowment for the same.

—To the Sheffield Medico-Chirurgical Society, Mr. Edward Barber showed a lad, æt. 15, the subject of a most marked form of pigeon-breast; the prominence of the lower portion of the sternum, with its attached cartilages, was extreme. The mother said that the boy was quite right until two years of age, when the breast changes began; they have been rapidly increasing of late. There is no deformity of the spine, and in other respects the boy seems well-nourished.

—Under the name of "Transverse Anterior Club Foot," M. Mollière, of Lyons, has described a deformation of the foot in which the first phalanx of one or several toes is in a position of forced extension, while the second and third are flexed. The arch formed by the heads of the metatarsal bones is flattened in consequence of the relaxation of the ligaments, and the patients complain of much pain after exertion. The symptoms are relieved by the use of an India-rubber pad, placed under the head of the second metatarsal bone, and the toes soon resume their normal position, but the treatment must be continued during several months.

Personal.

—Dr. F. Le Sieur Weir has resigned from the Medico-Chirurgical College of this city.

QUERIES AND REPLIES.

MESSRS. EDITORS:—

Is the common crude petroleum poisonous when taken internally, say in quantity of two or three ounces?

MARCIPAN.

Ans.—If the inquiry means whether it is liable to produce *fatal* results, we believe we may answer in the negative. Petroleum taken in such quantities would be partly vomited, partly passed off by the bowels, and the kidneys.

MESSRS. EDITORS:—

I notice that several prominent makers and venders of disinfectants say their compounds are endorsed by the Public Health Association. I cannot learn what the Public Health Association is. Is this a deception upon the public to boom their compounds? Please advise a reader.

MEDICUS.

Ans.—The title "The Public Health Association" is certainly very vague, and we believe is not the full name of any scientific body; we presume, however, that its employment is rather out of carelessness than an attempt to "steal thunder."

Dr. J. K. R., of Mo.—We should not care to recommend one college above another. There are at least a dozen in the country which stand at the top, and are equally good.